Apple2000

THE NATIONAL APPLE USERS GROUP

DECEMBER 1987 VOLUME 2 (6)

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FOR ALL APPLE USERS

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Editorial

You will see below a small article written by Computing and appearing on the front page of the November 11th issue. Apple completely ignored the allegation in the reply.

"Users bare their teeth at Apple" seems to be slightly over the top for what was a constructive criticism of Apple U.K.'s pricing policies and it's lack of support for the Apple II range. Apple have made a slight improvement in prices, hopefully this is just the start of getting near a realistic pricing structure !

On the Apple II front it is apparent from information received that Apple U.K. are not putting any effort into selling or promoting the Apple IIGS. I have heard of one dealer wondering why the thing would not work -he had no keyboard plugged in! Other dealers have simply not bothered to even buy a demo model, we will have to rely on the Bidmuthin's Holden's and MGA's to supply the goodies.

Whilst on about the Apple II I would like to thank Jon Gurr of MGA MicroSystems for his kind offer *(see letters page)* and also Steve Morrisby of Bidmuthin who has taken time to write the first of a regular AppleWorks column. We are lucky to have members who are in the trade and who support us in this way.

We have recently appointed as our Administrator Mrs Alison Davies who is at present getting to know the ropes. Alison was promptly thrown in at the deep end when she assisted us at the MacUser Show.

Our attendance at the MacUser Show was an outstanding success with a packed stand. We enjoyed meeting the many members who came along for a chat, sorry if we missed you in the crush!. I would like to welcome all those new members from the MacUser Show who will be receiving this magazine for the first time - thanks for joining us and I hope you find the experience worthwhile.

Many members including myself will be receiving a membership renewal form with this issue, I hope that you have found Apple2000 useful in the last year. We have been trying and we have not finished yet. Next year should see another dramatic increase in our activity, we have already organised two workshops and we are arranging an Apple II event. A large Workshop will coincide with the AGM and will cover both machines. All we ask is that you let us know what YOU want from YOUR club so that WE can arrange it.

Well that's it for another year I hope you all have a Wonderful Christmas and a Prosperous New Year and I look forward to the pleasure of your company in 1988.

Jim Panks

A postscript - Our trusty Apple II man Tom Wright has defected - he is now the proud owner of a Colour MacII - the good news is that he spent three months deciding that it was better than purchasing an IBM PS/2 !!!!

Users bare their teeth at Apple

By Keith Rodgers

Apple UK was accused last week of abandoning support for the Apple II range and of overcharging, despite the announcement that it had dropped prices across the Macintosh range.

The cuts reflect a growing commitment to the Macintosh at the expense of the Apple II, but all models remain vastly overpriced, according to the national user group Apple 2000.

Group chairman Jim Panks described the pricing policy as 'ridiculous'. He said: 'The people at Apple treat it as if they're selling razor blades or loaves of bread — as if they're just selling a product. They don't look at any other angle.'

The price cuts — as much as 13% on some models — are attributed to increased demand, as manufacturing costs decrease with a higher volume of output. According to product marketing manager Chris Calvert, the attempt to become more price competitive also reflects the company's desire to increase significantly its market share next year.

Calvert said: 'Many manufacturers in the UK now have roughly equal market shares. It's a major objective that we raise our head and shoulders above that mêlée.'

He denied allegations from the user group that support for the Apple II was poor or that the II GS model was widely unavailable. 'Resellers have had to handle the huge growth of Apple, and this has led to a refocus. However, many resellers are still selling the II GS.'

Coming in the February 1988 Issue.

A full review of Micol Assembler GS
Fullwrite Professional - How good ?
The return of Blyths Omnis pages!
AppleWorks Q & A
ALGOL - A look at languages.
Quickeys - the best utility yet !
Background - Hyper News - Views - tips.
SmartPad - A Mac DA by Blyth Software
Pressgang Publishing - The inside story.

Plus our regular News, Views, Tips and Techniques from the AppleWorld.

Club News

The MacUser Show

As you will see from our report elsewhere in this issue our attendence at the MacUser Show was an outstanding success.
It was nice to see so many old friends arriving on the stand which was full most of the time. The cost of attendance was high but we think that the effort was well worth while. Our stand was 'outSTANDING' and we helped hundreds of Macintosh Users solve many of the problems that no one else knew.
Thanks to those members that attended and helped us out, everyone enjoyed themselves although dealing with a crush for eight hours a day can be rather tiring on the feet, throat and brain!

Mac DiskLibrary

With this issue all those that have registered as Macintosh Users will have received a Macintosh Software Catalogue. This is bang up to date being printed just prior to the Mac User Show. The catalogue lists all 250 disks in the library.
If you have not received a copy and want one please contact the P.O.Box. We would ask members to read the notice in the front of the catalogue so that they order the right software for their machine. Norah Arnold has spent three months on this task and we would like the membership to gain as much from it.
Remember to send your orders **NOW** for early delivery before the **Christmas Postal Rush.**

Apple2000

HOT LINE NEW NUMBER

Dave Ward our HOTLINE guru has informed us that B.T. after an eighteen month delay have given him two weeks notice of a number change.
Well what can you expect - here is his new number which came into effect on the 8th December

[redacted]

Recommended Dealers.

Apple2000 has a small group of dealers that we have designated Recommended dealers.
These are the distributors, dealers and trade members that provide an invaluable service to the group and who we have found are reliable, helpful and most of all **USER FRIENDLY**.
We feel that our membership must have a reference point when it comes to buying hardware or software and our starting point is the Apple2000 Recommended Dealer List.
We are not saying that other dealers are not as able but we have hard evidence to prove that A2000 dealers are worthy of our members attention.
Please let your supplier know that you are a member of Apple2000. Maybe you will be treated better!
Please remember those that advertise with us they are supporting your group and deserve your support.

Workshops for 1988

Yes our Workshop co-ordinator has been busy arranging for some workshops to happen around the country. We will need your support to make them successful.
The workshops will be focused on a couple of subjects and will be machine specific.
We are always looking for venus for workshops and therefore ask the membership to help us in finding sutiable locations to hold the events.
The main requirements are:
a) Enough Room and Electrical Power Points.
b) Easy to get to.
c) Open on a Saturday.

If you have a particular subject that you would like to see covered lets us know. We are also on the look out for members with expertise to help at workshops. If you can help please let us know.

The first two workshops have been finalised just prior to publication and are included here to allow an early entry in your new 1988 diaries or the Calendar you will receive with this issue.

Saturday March 12th 1988 will see a workshop in the brand new sports and social pavilion in the pretty North Downs village of Kemsing situated near ~~Seven~~Eightoaks.
With easy access via the M25 we think that you will enjoy an informal day learning about HyperCard and DeskTop Publishing.
Saturday 26th March 1988 will see a workshop on Graphics/Scanners and HyperCard in the brand new AppleCentre in Kidderminster. This is the ideal opportunity for those living in the Midlands to have a great day out solving problems and obtaining that much needed advice.

Recommended Dealer List.
Bidmuthin Technologies
Blyth Software
Celtip Computers
Cirtech
DarkStar Systems
Holdens Computer Services.
MacEurope
MacLine
MacSerious Software
Maidstone Apple Centre
M.G.A. Micro Systems

Local Group News

Apple2000

by Tom Wright

In the last issue I very briefly mentioned a new group in **Poole (Dorset)**, I was able to call in at the Poole Apple Dealer during September and have the following notes for you.

'Mac User' evenings are organized at three monthly intervals by **DEVERILL** the local dealer. Deverill have been Apple dealers for about nine years and have been organizing User evenings for between four and five years. MacUser evenings start at 7pm and David Huckle told me that Hypercard was featured at the meeting prior to my visit in September, that meeting ended at 3am the following day ! Average attendance at the meetings (held at three month intervals), is between thirty and sixty so there is obviously a great deal of user interest in the area and plenty of potential for Mac users who have not yet been along to one of their meetings. Deverill have had a great deal of success in introducing the Mac to many users in the south and are very enthusiastic about the User evenings. Invitations to attend the evenings are usually mailed out to Deverill customers but if you haven't received one and wish to attend please contact David Huckle who will be very pleased to provide you with details of their next evening *(see contact list)*.

A new group for the contact list this month is the **Burnley Apple User Group**. The group, which has been in existence for about three years, meets at the Michelin Sports Centre on the second Wednesday of each month. Meetings start at 8pm and end "when they finish", an attendance fee of £0.50 is collected at some meetings. Membership includes a mixture of hobbyists and professional users and currently stands at about fifteen, most members are currently users of Apple II. Meeting format is varied with some meetings having guest speakers and others being informal. The current venue may change in about three months but no decision has yet been made. Contact Rod Turnough for details.

Colin Withington **(Doncaster)** has just telephoned me to (very gently) explain that I managed to get his telephone number wrong in the last issue, the correct number is [illegible]. Several people have already contacted Colin so it looks as if there is a good chance that we shall see another group developing in that area. Best of luck, let me know if I can help in any way.

Mr T Veluppillai **(Leeds)** has also contacted me in search of Apple users in his area. Mr Veluppillai (bit formal that but I'm short of his full name, is an Apple IIc user who may become a GS user in the near future, he can be contacted on [illegible].

Bob Miller is also in the Yorkshire area **(Pudscy)** and is another Apple II user seeking contact with other users. Bob can be reached during office hours on [illegible] and is keen to make contact. Another good sign of user activity in Yorkshire.

Mr C Robinson **(Darlington)** also contacted me about a user group and hopefully by now he will be in touch with The **North East Apple User Group**. Anybody else in **Durham** who is interested can either contact Mr Robinson on [illegible], or Philip Dixon (see contact list).

Graham Longbottom of Whitley Bay **(Tyne and Wear)**, has also been in contact and may now be in touch with the North East group.

There has been a change of contact for the **Edinburgh Scottish Apple User Group.** Adam Gilinsky tells me that Ricky Pollock is the new contact and Ricky can be contacted on [illegible]. This change has resulted from Adam's own career development move to the deep south (ie London). Hope to have more news of this group for the next issue.

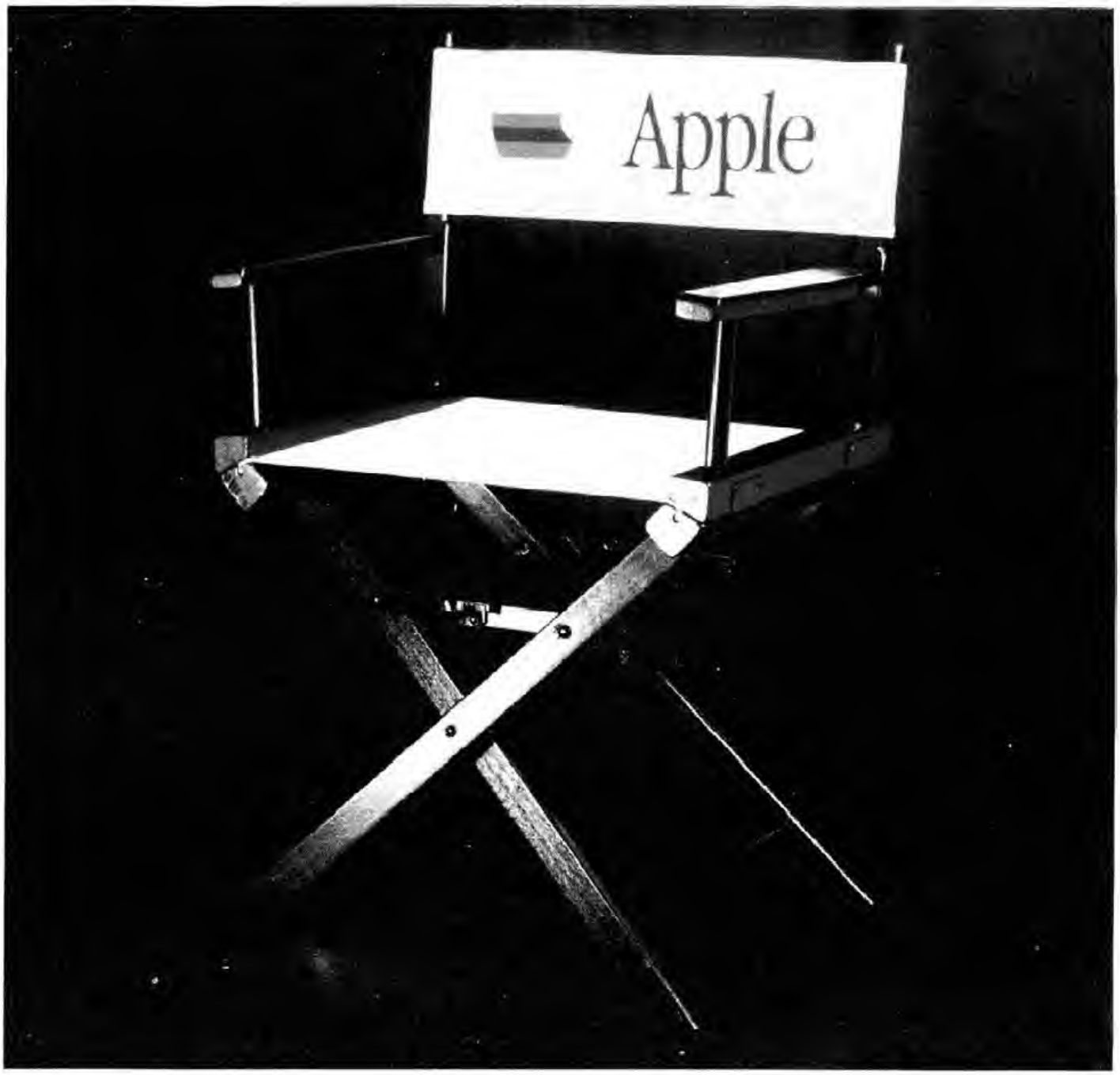
Well, that's been a productive period for making new friends and contacts which will hopefully help more users get together. We are still hunting for new groups, and willing to try to help establish them if required so please let me know of any that we haven't listed yet. Our contact list of friends and helpers is now comfortably past thirty and judging by the current level of activity it will not be too long before it reaches forty.

If you haven't yet taken the plunge and visited your local group please do go along and see what you have been missing. In common with many other users I use Apples (and others machines) in my business life, and during my visits to local groups I have been shown/taught many things which have helped me in professional work, you will probably have the same experience.

Although the User Group Council appears to be "resting", Mary Ainsworth is still getting out and about and a number of clubs have benefited from demonstrations of Hypercard recently. Even if you aren't 'Mac oriented' I recommend that you ask to see this demonstration as it is one of the most interesting that I have seen recently.

Happy (and/or profitable) Apples to you all.

Tom Wright



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The Apple Collection is available exclusively through Authorised Apple Dealers, so for full details of the Collection range and how you can order your items, pull up a chair at your nearest Apple dealer now.

Take your Pick from The Apple™ Collection

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Local Group News

APPLE DEDICATED GROUPS STARTING-UP

DONCASTER - SOUTH YORKSHIRE
Colin Withington, a Mac User in the Doncaster Area is starting a User Group. Colin can be contacted on 0302-53930, several people have contacted Colin so it could be a flyer!

DORCHESTER
CONTACT Ron Hoare Tel : [illegible]
Aeolus, 11 Redbridge Road, Crossways, Dorchester, Dorset.

LEEDS
CONTACT Bob Miller [illegible]
T Veluppillai [illegible]
Both interested in helping to form a group in this area.

SOUTHAMPTON
CONTACT Geoff Parson Tel : [illegible] (home) - [illegible]

ACTIVE APPLE DEDICATED GROUPS

APPLE II PROGRAMMERS CLUB
CONTACT Philip Dixon TEL : [illegible]
VENUE None — operates as a postal group via a monthly newsletter.

BENTWATERS APPLE USER GROUP
CONTACT John Thomas Tel : [illegible]
VENUE R.A.F. Woodbridge
MEETS 7.00pm first Tuesday of each month

BRISTOL GROUP (B.A.U.D)
CONTACT MIKE FARMER Tel : [illegible]
VENUE Decimal Business Machines, Three Queens Lane, Redcliffe
MEETS 7th of each month, or the Friday nearest if the 7th falls on a weekend.

BURNLEY APPLE USER GROUP
CONTACT Rod Turnough Tel [illegible]
VENUE Michelin Sports Centre
MEETS 2nd Wednesday of each month

CAMBRIDGE APPLE USERS GROUP
CONTACT Ian Archibald Tel : [illegible]
VENUE Varies, Isons Cycle shop, 72, Chesterton Rd., Cambridge,
MEETS Fortnightly

CROYDON APPLE USERS GROUP
CONTACT Graham Attwood Tel : [illegible]
VENUE 515, Limpfield Road, Warlingham, Surrey
MEETS 7.30pm on the third Thursday.

EAST MIDLANDS MAC USER GROUP
CONTACT Nick Helm Tel : [illegible]
VENUE Wilford Cricket & Rugby Club, Nottingham
MEETS 8.00pm on the first and third Wednesday

EDINBURGH GROUP
CONTACT Ricky Pollock Tel : [illegible]
VENUE Proteus Micro Systems, 55, Frederick Street, Edinburgh, EH2 1LH
MEETS Monthly, check with Ricky.

ESSEX GROUP
CONTACT Pat Bermingham Tel : [illegible]
VENUE The Y.M.C.A., Victoria Road, Chelmsford
MEETS Third Friday of every month

GATEWAY COMPUTER CLUB
CONTACT Robert D Hall Tel : [illegible]
VENUE Bob Hope Recreation Centre, R.A.F Mildenhall
MEETS Normally meets at weekend ,check with Bob before going along.

GLASGOW GROUP
CONTACT Donald Davidson Tel [illegible]
VENUE Proteus Micro Systems, 17, Park Circus Place, Glasgow
MEETS 3-4 times per year, check with Donald

HANTS & BERKS GROUP
CONTACT Mike Hollyfield Tel : [illegible]
VENUE Thames Valley Systems , 128 High Street, Maidenhead, Berkshire, SL6 1PT
MEETS 7.00pm on the second Monday.

HERTS & BEDS GROUP
CONTACT Norah Arnold Tel [illegible]
VENUE The Old School, 1, Branch Road, Park Street Village, St Albans, Herts.
MEETS 8.00pm on the first Tuesday.

KENT GROUP
CONTACT Richard Daniels Tel : [illegible]
VENUE Microspot 5-11, London Road, Maidstone.
MEETS 7.30pm on last Monday of each month.

LONDON APPLE II COMPUTER CLUB
CONTACT Chris Williams Tel : [illegible]
VENUE Studio 8, Wharfedale Projects, 47, Wharfedale Road, London, N1 9SE
MEETS 6.00pm, first Wednesday of every month.

LONDON MACINTOSH GROUP
CONTACT Maureen de Saxe Tel : [illegible]
VENUE Room 683, London University Institute of Education, Bedford Way, London, WC1
MEETS 6.00pm on the second Tuesday.

MACINTOSH USER GROUP (CAMBRIDGE)
CONTACT Patrick Winterson Tel : [illegible]
VENUE Formal venue now established.
MEETS Every three months.

MACTAFF - SOUTH WALES MAC GROUP
CONTACT Lorrain Thornback Tel [illegible]
VENUE Apple Centre South Wales, Longcross Court, 47 Newport Road, Cardiff
MEETS 7.00pm on the first Thursday .

MIDAPPLE
CONTACT Tom Wright Tel [illegible]
VENUE I.T.E.C., Tildasley Street, West Bromwich.
MEETS 7.00pm on the second Friday.

SOUTH EAST ESSEX MAC GROUP
CONTACT Mick Foy Tel : [illegible]
VENUE D.P.S., Acorn House, Little Oaks, Basildon, Essex.
MEETS First Monday of every month

THE MIDLAND MAC GROUP
CONTACT Ivan Knezovich Tel [illegible]
VENUE Spring Grove House, West Midland Safari Park, Bewdley, Worcestershire.
MEETS 7.00pm on the first Tuesday .

THE NORTH EAST APPLE USER GROUP
CONTACT Philip Dixon Tel : [illegible]
VENUE AppleCentre North East, Ponteland Road, Ponteland, Newcastle-upon-Tyne
MEETS First Wednesday of every month

THE NORTH WEST APPLE COMPUTER CLUB
CONTACT Jim Rosco Tel : [illegible]
VENUE Horse & Jockey Pub., Winwick Road, Warrington
MEETS First Monday of every month

POOLE MACINTOSH USER GROUP
CONTACT David Huckle Tel : [illegible]
VENUE Deverill Computers (Dealer)
Itec House, 34-40, West Street, Poole, Dorset, BH15 1LA
MEETS Four times per year.

MULTI-INTEREST GROUPS WITH APPLE USERS AMONG THE MEMBERSHIP

CREWE COMPUTER USERS CLUB
CONTACT Paul Edmonds [illegible]
VENUE Christ Church Hall, Crewe
MEETS Fortnightly, Fridays, 7.30pm to 10.00pm

LEICESTER GROUP
CONTACT Bob Bown Tel : [illegible]
VENUE Shakespeare Pub, Braunstone Lane, Leicester
MEETS 7.30pm to 10.0pm on first Wednesday .

WEST MIDLANDS AMATEUR COMPUTER CLUB
CONTACT John Tracey Tel : [illegible]
VENUE Hill Crest School, Simms Lane, Netherton, Near Dudley.
MEETS 7.00pm on the 2nd & 4th Thursday.

APPLE DEDICATED GROUPS IRREGULAR ACTIVITY

FURNESS AREA
CONTACT Alan Curtiss Tel : [illegible]
NOTE There has been more activity in this area recently, I have been unable to contact Alan for some time so check with him yourself.

APPLE USERS IN CONTACT NO ORGANIZED GROUP

HARROGATE AREA
CONTACT Peter Sutton Tel : [illegible]
A number of keen Apple users in contact with each other.

STOP PRESS
LIVERPOOL GROUP NOW ACTIVE
Contact: Irene Flaxman Tel: [illegible]

MACTEL
THE EUROPEAN BBS FOR MAC USERS
NOW MULTI-USER
V21/22/22bis/23
8 BIT - NO PARITY - 1 STOP - FULL
[illegible]

Text handling is very easy, you can either enter it straight into the program by using the Text symbol or you can PLACE it. Whatever method you use the facility for moving text around and changing the formating is the same. You have a TYPE menu item which allows the choice of fonts and styles, you also have the choices of formating and Black or White text. The last choice allows the printing of black boxes with white text just like the newspapers.

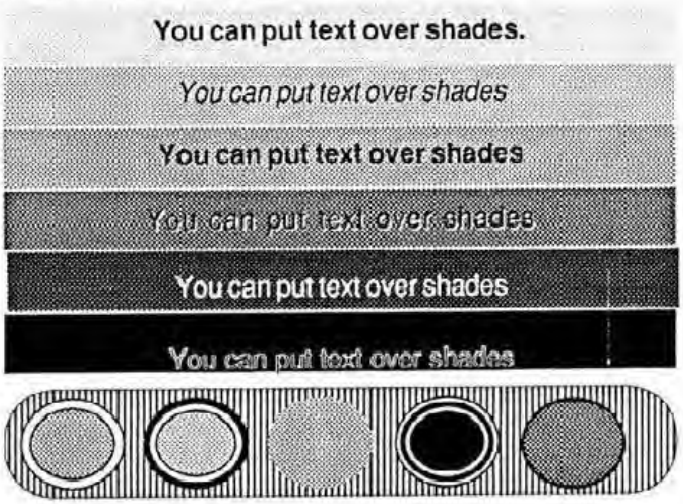
Text is stored in blocks with a starting marker and ending marker, if the text block is longer than the space available you can PLACE it any other area, the program remembers the location of text and allows you to move the text around. If you place text and have some in another place it will move text between them if you enlarge or decrease the area of either piece. If you change margins and then replace the text it will automatically realign any following text. This allows for flowing around pictures and drawings. This facility works across page boundaries so you can place text on two or three seperate pages in the same publication.

The page has some space on either side this is called the cutting board and allows you to manouever pictures and text before incorporating it into the page layout. You can also do some precise measurements using the ruler and markers. You can have either metric or Imperial measurements. The whole layout proccedure takes no more than an hour of practice before you can produce fairly profesional results.

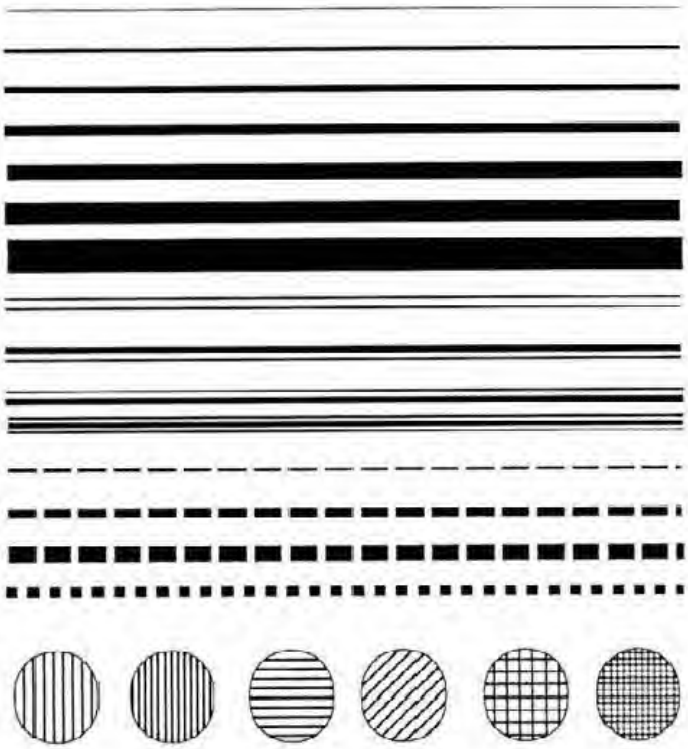
To illustrate the ease of use the system I used to produce the February Hardcore went something like this.

1. Set up the marginsand columns.
2. Set up the left and right page master items. (Headers etc.)
3. Copy the file to another disk (Standard Format File).
4. Get articles together and place on Start-up Disk.
5. Get MacPaint Files in to Scrapbook.
6. Re-boot and start on pages 1-6
7. Do heading and then place text file etc.
8. Check spelling and tidy up pages.
9. Repeat the above 7 times.
10. Take disk to local dealer and print on Laserwriter.
11. Send to printers.

You can draw lines, boxes and circles with various shades and line thicknesses. You can then put the boxes and lines behind or in front of other objects including text. This enables you to put text into shaded boxes and overlay objects:



The various line thicknesses and shading patterns available are shown below - these give a fairly comprehensive number of variations:



The ability to produce good quality publications is now within the reach of the small business and I can see the whole area of Desktop Publishing becoming a very competetive market. Apple have with the Macintosh, Laserwriter and PageMaker made a very large inroad into this market and it will be some time before the others catch up.

I can through my experience with PageMaker reccommend it to anyone desiring a good quality publication without the hassle of typesetting. The other good point is that this set-up does not work 9-5 and therefore those urgent jobs can be produced without relying on someone else.

The quality of the output can be gauged by this journal as PageMaker is used for all the artwork. Remember the limitation when used without a hard drive or twin 800k drives.

Stop Press.

I have been able to use PageMaker with a MacPlus and a 800k external drive and the extra speed and drive capacity has saved about an hour on disk swapping and file transfers. This was on only twelve pages and therefore is about a 20% saving overall. If you are going to use PageMaker in a business environment then you must look to a MacPlus and as much disk space as you can afford. As Hard Drives fall in price I feel this is the only route to take. I have also heard that a new version of PageMaker will be available during the Summer. Not that there is anything wrong with version 1.1.

PageMaker by Aldus is distributed in the U.K. by McQueen Systems Ltd, 18 South Goathill Avenue, Edinburgh, EH4 2LN - Telephone 031-343-3191

Letters to the Editor

Defence of the //

Dear Jim Panks,

In response to your editoral, I leap to the defence of Apple //. I happen to have a // c, but //c or //e accompanied by AppleWorks still seems to do practically anything any other integrated program will do, with very little extra key-pressing, and with the help of Beagle's MacroWorks, LESS key-pressing.
For two reasons I have been obliged to make use of an Amstrad PC, for an Open University Course, and in order to use a data-input program from The Museum Documentation Association. All over the Amstrad's Gem format one finds pale reflections of the Mac, but compared with the cinema-organ keyboard of the Amstrad (and most others nowadays), I am particularly struck by the marvellously economical use of space and keys by AppleWorks on the //c.
If only I could have added CP/M AND expected the MDA's disks to have worked on my //c's drive, I might never have put a foot in both camps.
In our 'History Society' we are evolving a database using Omnis 3+ with a Mac+, and intend to continue with it in spite of MDA's reluctance to produce a Mac or an Apple// version of their data-input program. I am about to experiment with file-transfers from the //c to Omnis on the Mac, using a cable, Apple and Mac communications software, hoping later to do the same via modem and phone. Later still we might try to get files into the Amstrad's CP/M data-input program. Can any of the Group give me hints on where the problems are likely to occur, or are they too busy trying to sell their Apple //'s?

Yours sincerely,

P.C. Arnold
Channel Islands

Ed's reply: *Firstly thanks for the reply, the Apple // is a good machine and still has a lot to offer the business, educational and home user. The rot seems to have come from Apple U.K. - in the U.S. they still sell large numbers of the // range and software is still being written for it.*
You can add C/PM to a //c but it still will not run IBM software although a card is being developed for the IIGS.
I hope that we will get some response to your request for help!

Printer problems

Dear Sir,

The following tale is a much-shortened account of a problem I experienced with the above set-up, which may be of help to others.

When I first purchased the system I also bought Appleworks v 2.0. Printing from this program resulted in only about three-quarters of a page being printed before a line of gibberish appeared and the system stopped dead.
My supplier's salesman, plus technician, tested all they could think of, and the printer cable was changed in case there was a fault in it, but to no avail. After some days my supplier told me to change DIP switch SW-3 to closed, on the advice of Apple (UK) Ltd. This provided a solution to the Appleworks print-out, but then problems were discovered with random column mis-alignment in older DOS program printouts.
My supplier apparently having gone to ground, I approached Apple (UK) Ltd directly. After much hassle it was discovered that the printer cable was not the correct one, and after replacing this, and resetting SW-3 as per manual, all was sweet and light!
One other problem that confused the issue was that when 'LIST'ing an Applesoft program to the printer resulted in overprinting if the line was longer than 80 characters. This, however, is a problem inherent in the design of the Imagewriter. It can be solved by setting the soft switches to give an appropriate line feed, either from a Basic program or a machine-language one.
The wrong cable should never have been supplied in the first place. After that, notice should have been taken by my supplier and Apple (UK) Ltd, rather than ignoring me in the first instance and telling me that it was my programs that were at fault in the second. One 'Appleperson' even said that it was the operating system that was at fault. I had to be very blunt with Apple before I got put in touch with a Senior Technical Support Specialist, who did everything to put things right quickly and efficiently, explaining as he went along.
Having previously had an Apple II+ for over five years, albeit overseas, I was very happy to invest quite a lot of money in the new GS when I returned here. But it appears that Apple is very poorly managed in this country, and I shall keep Cupertino advised in any further problems I experience.
Yours sincerely,

J.C. Clayton
Northants

Ed's reply: *Mr Clayton has a valid point however I must re-enforce his experience with the Technical Support Department at Apple UK - When they get involved with a problem they do a first-class job - they do know what they are talking about. Some dealers however seem afraid to ask them and they are the only ones with direct access. Remember that Apple2000 can help in many instances - through the hot line. We are always intrested in members views on their dealer - maybe we should have a* ***'USERS' DEALER OF THE YEAR AWARD!***

Well presented.

The Guardian
119 Farringdon Road,
London EC1R

Dear Sir,

Thanks very much for sending me a copy of Apple2000. I read it with interest, and it is well presented.

Yours sincerely,

Jack Schofield
Computer Editor

Ed's note: *We sent magazines out to journalist recently - we received the above from Jack Schofield. It is nice to have compliments from the professionals.*

Leaving the camp

Maidenhead,
Berks.

Dear Jim,

Congratulations on your comments on the front page of the 12th November issue of COMPUTING relating to the Apple IIGS. Well Done! It is time Apple were told they are overpricing themselves.
I have been an Apple II user since April 1981 but now find it too expensive to upgrade to an APple IIGS because of the ridiculous price Apple are asking.
Our local dealer has just sold off his colour IIGS for £995 because he is no longer keping a demonstrator. He thought I might be interested ..... but the Amstrad 1640 with a 20meg hard disk is only £1125 and is reputed to be IBM compatable so I turned his offer down.
Unless Apple offer the GS at a price that has some realistic relationship to the cost of the component parts, I shall just have to change to Amstrad.
Thank you for bringing this pricing policy into the open.

Yours sincerely

Barry Hill.

Ed's reply: *Thanks for your letter. My remarks hopefully have reached the management team at Apple although I think not. What Apple in the U.K. is doing is to turn their back on the huge Apple II base that has been built up over the last five years. In the U.S. it is the other way around - Apple offer current users support and encouragement to stay with them.*
I hope that AppleU.K. will put some effort into keeping Apple Users within the Apple Camp, although they appear to only want a small slice of the corporate market.

News from the 'Apple World'

NEWS BYTES

Compiled by Jim Panks

QuickKeys

This new utility from CE Software allows the setting of macros to do numerous tasks instantly. It will work with all Macs using the new ROMS. I must confess that I went and bought one before receiving a review copy and it ranks in my books as the Best Macintosh Utility of 1987.
A review in the next issue!
Available from **MacLine** for around £55.

WordPerfect Macintosh

Yes at last WordPerfect for the Macintosh has been released and is available from your Apple Dealer at £299. Containing a word counter, spelling checker, thesaurus, sort and mail merge it is very powerful and has many of the features lacking in Word3.
A useful feature is the ability to import IBM style WordPerfect files. For more details contact your local Apple dealer or **Sentinel Software - 0932 231164**

HyperText relaunched.

Guide 2.0 is a new version of the first HyperText application from Office Workstations in Edinburgh. Designed to appeal to the corporate market in the Information areas it will easily link to mainframes, video disks and other hi-tech equipment. No price but an upgrade from version 1.0 is available.
Office Workstations 031-659-6737

MiniQisk - Cables - etc.

Computer Capability have released a very nice 20mbyte SCSI drive which whilst being priced at the lower end is a full featured hard drive. Phillip Bath is probably one of the foremost experts in the SCSI field in this country has now built up a very complete range of drives from the MiniQisk up to a 140 mbyte internal Mac II drive. The build quality is high and Phillip has ensured that the drives are fast and affordable.
If you need any cables then you will have to go no further than Computer Capability who now have a range of nine cables covering all the normal needs of the Macintosh User.
If you want more information contact **Computer Capability 0753 841659**

Lotus reveals its plans.

After Jazz fell by the wayside Lotus look set to launch two new packages for the Macintosh in the new year. The first is called Modern Jazz and follows the IBM software package Galaxy. The second package which will be Macintosh 1-2-3 is not expected to appear before the end of 1988.

Postscript News

News about forthcoming Postscript products include Display Postscript which will be available sometime next year, Steve Jobs is apparently working with Adobe to ensure that this new display standard is available for workstations in the near future.
The next generation of printers to use Postscript will be with us in the first few months of 1988 and it is no secret that QMS will launch a colour printer using the Mitsubishi thermal transfer engine and giving a resolution of 300*300 d.p.i.

FullCalc beta testing.

Even though FullWrite is still not available Ann Arbour are apparently beta testing a new spreadsheet called FullCalc. FullCalc will have to be good to compete with such standards as Excel and the expected new applications from Lotus.
No dates, prices or specifications have yet been released - hopefully they will wait until it is ready!

RAM Upgrades prices down!

In the United States Apple have slashed the price of its RAM upgrades even though the supply is almost dried up due to problems with the Japenese supply and the number of Apple Users wanting extra memory to run all the latest memory hungry applications.
Apple has reduced its 1 megabyte upgrade from $399 to $249 and its 2 megabyte from $999 to $599. Needless to say this has caused some concern to third party suppliers who have had to follow suite.
Apple in the U.S. have been seen recently to be forcing prices down which can only be good news for the user. Now all we need is Apple U.K. to followCupertino!

Copy II Mac Version 7

Centre Point Software have announced the release of version 7 of the popular back-up utility for the Macintosh. It comes complete with MacTools which helps recover crashed disks. The new version has a powerful undelete command for recovering a file together with the name, type and creator.
U.S.Price is $39.95 and registered owner can have an upgrade for just $18.
Available from **Macline** at £22.

New Mac game - 1

PCAI the publishers of MacGolf have a new game for the Macintosh called MacRacquetball. This is a game similar to squash and allows two players to play using the AppleTalk network or a modem. Utilising over one thousand frames of digitized graphics it allows the player complete control. So when the court is booked why not have a more relaxed game on your Mac!
If you already have MacGolf then try MacCourses - it is a disk of four new courses to test your skills.

New Mac game - 2

Epyx have launched Sub-Battle a really good simulation of the U.S Navy at work during WWII. The user interface is an improvement on Gato and includes realistic sounds. You can choose to play a single mission or the whole war period. Save allows you to stop for some fresh air. I hope that we can bring a review in the next issue of a really clever game to take your mind off all those spreadsheets and things.
An ideal present for christmas at just £34.00 from **MacLine.**

New Mac game - 3

Electronic Arts the well known Apple II software house have released a Macintosh Chess game called Chess Master 2000. Chess Master is a complex game made easy by a very good user interface - it includes excellent graphics with 2 or 3d playing boards - real time clocks and many user options - it is one of the best Chess games I have seen implemented on any machine and if you want to get the grey matter going this is the place to start!

NEWS BYTES

MGA MicroSystems Move

After many years in the centre of Tenterden MGA have moved out to larger premises at Appledore and an appropriate place for anyone who adores the Apple. So fromthe 1st December please note the new address:
MGA MicroSystems
Pear Tree,
Appledore,
Kent TN26 2AR
Tel 0233 83571

ProMac

MacEurope have released ten new SCSI devices under the ProMac name. These include 20, 40, 50, 80 and 160 megabyte external hard disk drives and 40 or 80 internal Mac II drives. Other new drives announced include the ProDrive 10 which is a removable cartridge drive with claims that it is faster than a 20 megabyte normal drive. The ProTape 60 is a SCSI back up tape drive transferring data at 3.3 Megabyte per second.
Further information and prices from **MacEurope 01-965-6905**

HyperCAD

Desktop Engineering Systems have announced HyperCAD a 2D CAD package for the Macintosh II with a minimum of 2megabyte of memory. HyperCAD users have access to over 500 basic commands through a user interface that follows the Mac Interface. It has a built in Macro Command Language and users can define their own compound commands. For further details contact **DeskTop Engineering Systems 0895 637037**

New Apple Dealership

Bidmuthin Technologies of Apple II fame have now been granted an Apple dealership and at the same time have moved to Brent House, 214 Kenton Road, Harrow, Middlesex HA3 8BT. Telephone 01 907 8516. As well as selling the Macintosh Series Bidmuthin will be supporting the Apple II and IIGS. They are a level one service centre and will still be bringing in from the U.S. hardware for the Appler II by Applied Engineering.
Bidmuthin are an Apple2000 Recommended Dealer.

CE SOFTWARE

CE Software News

CE Software have now completed the change from ShareWare publisher to full-time utilities developer and publisher.
For many years the utilities from CE have been outstanding and now that they are producing them commercially the utilities have been enhanced.
MockPackage Plus contains 5 utilities including the famous MockChart, Printer, Terminal and Write. You also get a bonus of EZ-Menu. Price in the US $35.
MacBillboard is a nice enhancement to MacPaint which also includes MacBanner for printing large posters etc. Files created are compatible with MacPaint and it costs $35.
CalendarMaker 3.0 is the latest release of this utility that allows you to create, maintain and print your own calendars. You also get a bonus of IconMover which allows you to open, copy, paste and turn icons into resource files. A nice little bonus at just $49.95.
DiskTop version 3.0 is the latest release of a real winner. This is a housekeeping program for your every day tasks, it allows you to delete, move, create,copy a new folder or file from within a program - it really saves time by letting you do jobs without going back to the slow finder. You can do searches and finds on your hard disk without going near the finder and to top it all you get two bonus programs - Widgets and LaserStatus which means a disk packed full of useful utilities for the discerning Macintosh User.
Together with **Quickeys** CE have a good repertoire of utilities which should find a home in many MacUsers stockings this Christmas.
CE Software can be purchased in the U.K. from **MacLine**.

Findswell & Spellswell

Working Software have now launched their latest software in the U.K. through MacEurope. **Findswell** is a replacement for the Apple Find File and will locate files in half the time. It also allows the finding of documents from within application dialog boxes and you can remember frequently used documents for faster access.
Spellswell is a new spell checker and proofreader with a 93,000 word dictionary and an unlimited capacity for additional words. It can be used with several specialist dictionaries including a **legal** and **medical** dictionary.
Lookup is a DA spelling Guide which uses the same dictionaries as Spellswell. It will alert you when you make a mistake and suggest an alternative or replace it with a correctly spelt word.
All these products are now available from **MacEurope on 01-965-6905.**

FreeHand announced.

Aldus have announced the introduction of a new drawing package called FreeHand. It will be approachable as a basic drawing tool whilst having many high level functions such as special effects tools, advanced text handling, and colour capabilities. It would seem from reports to be a super Illustrator and will be available sometime towards April. Price will be in the £450 region.
Any enquiries to Aldus but dont expect too much of a reply just yet!

Pixel Paint

SuperMac Technologies have announced the availability of Pixel Paint for the Macintosh II with full colour capabilities. Pixel Paint includes all the familiar MacPaint tools together with a wealth of increased functionality in addition to colour support. The minimum configuration required is a Macintosh II, 1meg RAM , a hard disk and a colour monitor.
Contact your **Apple Dealer or SuperMac Technology on 01 847 2101/2571**

PageMaker 3.0

Aldus announced PageMaker 3 for the Macintosh at the MacUser Show. Version 3 will have a multitude of new features which have been asked for by users. Over 30 new features have been added including Automatic Text Flow through the whole document, User defined style sheets, page design templates, spot colour, automatic text wrap around graphics. The minimum configuration will be a Macintosh 512E with at least a Megabyte of memory and a hard disk. Expect this to be available before March and the price will be £545 no upgrade prices have been announced yet.

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INNOVATION

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3.5 Disk	g	g	
Slot RAMcard	+ e c g	+ e c g	
SCSI Hard Disk	+ e c g		
SmartPort Hard Disk	+ e c g	+ e c g	
Profile Hard Disk	+ e c g	+ e c g	
IIGS Internal RAMdisk	g	g	
IIGS Internal ROMdisk	g	g	

(+ = Apple II or II+; e = Apple //e; c = Apple //c; g = Apple IIGS)
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COBOL

Dave Miller continues his series on languages with a look at COBOL

In the late 1950s, the Pentagon was given a brief to develop a computer language suited to the needs of the business community. Many people had realised that the computer's numerical abilities were ideally suited to many routine business applications whilst no suitable programming environment existed. The only reasonably well-known programming environments were either assembly language or FORTRAN: both of which were not ideal, to say the least. The resultant language was released in 1959 and was called by the grand title of "Commercial and Business Oriented Language", COBOL for short.

Since that time COBOL has generated much debate about its fitness as a language. COBOL seems to be somewhat similar to the Great Western Railway: people seem either to love it or to loathe it. Edsgar Dijkstra, the famous Dutch computer scientist, commented that "teaching COBOL ought to be regarded as a criminal act." While this may be a bit strong, it is maintained by some that COBOL is a form of job security because it makes programming so unpleasent as to dissuade all but the mad or desperate.

There are several reasons for this unusual regard for the language. One is because the language was designed to be self-documenting. This seems to be an impossible task because any self-documenting program can be made obscure by the poor choice of variable and procedure names by the programmer. In practice, COBOL requires comments just as much as any other language. The result is an extremely verbose language which can be frustrating to program in, especially if the programmer is used to other, more succinct, languages. Many regard this verbosity as totally irrelevent and point out that carefully written code in any language, no matter how brief, can be made perfectly understandable by the use of clear and concise comments (I don't believe that!).

Compare the following equivalent COBOL and BASIC: statements:

COBOL

```
MULTIPLY VAL1 BY VAL2 GIVING RESULT.
```

BASIC

```
RESULT = VAL1 * VAL2
```

It is obvious that COBOL's version is rather more verbose. It is true, though, that COBOL's version is far more powerful with various optional qualifiers which can be used to modify the function performed. For example:

```
MULTIPLY VAL1 BY VAL2 ROUNDED GIVING
RESULT ROUNDED ON SIZE ERROR GO TO ERR.
```

The Language of Business

The above statement rounds both VAL2 and the result. On a size error (that is either overflow or underflow) execution is transferred to the statement marked with the label ERR.

The self-documenting feature also reflects itself in the terminology used to describe the various features of COBOL: there are no KEYWORDS, COBOL uses VERBS and statements are renamed clauses or sentences.

Another reason for COBOL's notoriety may be due to COBOL's success. Much of the criticism has come from possibly disgruntled followers of less popular, but more aesthetic, languages. There is no doubting COBOL's success, no matter how unwarrented some may feel it to be. The fact that COBOL was the first commercial language obviously helps as does its stability: the core of the language has hardly changed at all.

COBOL is a very large language: a huge amount of business features are provided as standard by the compiler. This means that the compiler itself has to be very large. It also means that compilation is a long process. Whereas a Pascal compiler need only scan the source file once to produce the object code (a one-pass compiler), it is not unusual to find a COBOL compiler having to perform seven passes on the source file to produce the object code. This has one benefit in allowing various optimisation techniques to be employed by the compiler to produce more efficient machine code. These techniques invariably involve multiple passes of the source file so if these passes are already being done, the techniques might as well be employed. The processing required to optimise the code is often much less than that performed by the compiler in translating the code and assembling the machine code.

Thus COBOL programs are often very efficient. Some people have gone as far as to say that a COBOL program can be up to ten times more efficient that an equivalent program written in FORTRAN. I think that FORTRAN's illsuitedness to COBOL's application field may have more to do with this performance difference than any code optimisation on the part of COBOL.

A COBOL program is usually split into four DIVISIONS. The first division is the IDENTIFICATION DIVISION. This lists the program name, its author, the date of creation and other details. The next division is the ENVIRONMENT DIVISION. The environment division is split into various SECTIONS. The CONFIGURATION SECTION lists the computers on which the code was written and on which it is to run. These are usually the same but not always: sometimes one machine is used to create code for another computer.

The INPUT-OUTPUT SECTION lists the various input and output files used and their characteristics. COBOL supports not only the normal sequential files (like DOS 3.3's text files) but also supports random access files and various forms of index sequential files. Files are assigned to a particular logical device. The most common devices used are the VDU (screen and keyboard), disc drive, tape drive and printer. In older systems the punched card reader was a common form of input and the line printer or card puncher was the usual form of output.

The next division is the DATA DIVISION. This defines all the variables to be used in the program (note that, like BASIC, the variables are global to the whole program). This is really COBOL's strength. COBOL variables are not really like the variables used in BASIC. A variable can refer to more

than one individual data item. For instance a variable could hold a complete line from a data file. This can be split into the various fields making up the line. These fields can, in turn, be split into the constituent data items making up each field. Thus a variable can constist of different levels of detail, the "higher" the level then the smaller and more detailed the data item. COBOL allows the data to be handled in terms of all the defined levels, thus making it very easy to manipulate data in the form of whole chunks of information or as individual data values.

The individual data items are defined by giving them a PICTURE. This defines the size and format of the variable by using special editing characters similar to the PRINT USING feature of some BASICs.

This is especially useful in defining output lines to be sent to the printer. By using special editing features the exact format of printed output can be easily and powerfully specified.

The data division's FILE SECTION lists all the variables associated with each of the files defined in the INPUT-OUTPUT SECTION of the ENVIRONMENT DIVISION. This allows the exact format of files, in terms of the internal organisation of data, to be defined. In effect, the file buffers are defined in the FILE SECTION.

The WORKING-STORAGE SECTION defines those data which are to be manipulated by the program in performing its calculations.

An optional section of the data division is the REPORT SECTION. This is a very powerful feature which is sometimes absent on smaller compilers. It allows whole printed reports to be defined, page by page. Once the various data have been inserted into the "holes" left in the report, the report is automatically printed with the characteristics defined (such as page size, layout, number of copies etc).

The last division is the PROCEDURE DIVISION. This is the actual code. It can be split into named SECTIONS which loosely correspond to procedures or subroutines of other languages. These can, in turn, be split into "paragraphs". A paragraph is a group of "sentences". A sentence is one or more COBOL verbs and any associated arguments terminated by a full stop. Sentences can be joined together by seperating them with commas. This can be used to force a group of sentences to be taken as a whole, such as a multiple sentence following an IF verb.

COBOL has many verbs, some of which provide some very sophisticated features such as searching and sorting. COBOL is, though, lacking on the more structured statements which are founden in the more modern languages. Even FORTRAN has more structuredness than COBOL.

The basic way of assigning values to a

```
The following program reads in a time sheet file consisting of the following
fields:
payroll number  employee name       group no.    hours worked
8 digits        60 characters       4 digits     2 digits

The program sorts the file into order based upon descending hours worked and
ascending payroll number so that the employee who worked the least is listed
first. The program then outputs the resulted file to the printer.

 IDENTIFICATION DIVISION.

 PROGRAM-ID.              SORT-TIME-SHEET.
 AUTHOR.                  D.M.MILLER.
 DATE-WRITTEN.            20TH MAY 1987.
 REMARKS.                 Program to sort and output time sheet file.

 ENVIRONMENT DIVISION.

 CONFIGURATION SECTION.

 SOURCE-COMPUTER.         El-whizzo-megamachine.
 OBJECT-COMPUTER.         El-whizzo-megamachine.

 INPUT-OUTPUT SECTION.

* This defines the files to be used- sequential files are default

 FILE-CONTROL.
      SELECT IN-TIME-SHEET  ASSIGN TO DISK.
      SELECT SRT-TIME-SHEET ASSIGN TO DISK.
      SELECT WORKFILE       ASSIGN TO DISK.
      SELECT REPORT         ASSIGN TO PRINTER.

 DATA DIVISION.

 FILE SECTION.

* This defines the format of the files used- note the way the file
* characteristics are defined (FILE-ID is the file's name)

 FD   IN-TIME-SHEET,
      LABEL RECORDS ARE STANDARD,
      VALUE OF FILE-ID IS 'INTIMESHEET',
      DATA RECORD IS IN-TIME-REC.
 01   IN-TIME-REC                PIC X(74).

 FD   SRT-TIME-SHEET,
      LABEL RECORDS ARE STANDARD,
      VALUE OF FILE-ID IS 'SRTTIMESHEET',
      DATA RECORD IS SRT-TIME-REC.

* The following is a two-level definition of the file consisting of
* four fields, the payroll number, the employee name, group number and the
* number of hours worked- note the pictures defining the fields'
* characteristics

 01   SRT-TIME-REC.
*          payroll number            eight digits
      02   PAYROLL-NO           PIC 9(8).
*          employee name             60 alphanumeric characters
      02   EMPLOYEE-NAME        PIC X(60).
*          group number              four digits
      02   GROUP-NO             PIC 9(4).
*          hours worked              two digits
      02   HOURS-WORKED         PIC 99.

 FD   REPORT,
      LABEL RECORDS ARE OMITTED,
      DATA RECORD IS REPORT-LINE.

* Printer file: 110 characters per line plus an extra character for
control
* character line control

 01   REPORT-LINE.
      02   FILLER               PIC X.
      02   LINE                 PIC X(110).

 SD   WORKFILE,
      LABEL RECORDS ARE STANDARD,
      DATA RECORD IS WRK-TIME-REC.

* Sort work file

* Note the use of FILLER to reserve the space for those fields which are
* not used during the sorting

 01   WRK-TIME-REC.
      02   WK-PAYROLL-NO        PIC 9(8).
      02   FILLER               PIC X(64).
      02   WK-HOURS-WORKED      PIC 99.

 WORKING STORAGE SECTION.
```

variable is via the MOVE verb:

```
MOVE 21 TO COUNT.
MOVE DATE TO RECORD-DATE.
```

The GO TO verb allows execution to be transferred elsewhere. The destination is indicated by using a label. It is interesting that only COBOL, of all the mainstream computer languages, allows labels to be alphanumeric strings, as opposed to simply a number.

```
GOTO END-PROC.
...
...
END-PROC.
...
...
```

The IF verb provides the main way of altering execution depending upon some condition:

```
IF VAL > 2
   MOVE GREATER-THAN-2 TO CONDITION
ELSE
   MOVE NOT-GREATER-THAN-2 TO CONDITION.
```

Multiple sentences can be used to force more than one sentence to be executed:

```
IF FILE-ID = END-OF-FILE
   DISPLAY "End of file reached",
   MOVE 2 TO VALUE,
   GO TO END-PROCESS.
```

The PERFORM verb is one of the most powerful verbs in COBOL. It allows paragraphs to be called in a similar way to subroutines in BASIC. It also provides COBOL's only means of iteration.
For instance the following sentence performs the paragraph PROCESS four times in succession:

```
PERFORM PROCESS 4 TIMES.
```

A FOR loop can be implemented by:

```
PERFORM PROCESS VARYING INDEX FROM 1 BY 1
UNTIL INDEX = 10.
```

A WHILE loop is implemented by:

```
PERFORM PROCESS WHILE PROC-STATE = DO-
PROCESSING
```

The above sentence, though, is slightly misleading because the condition is evaluated after PROCESS has been called. So PROCESS is always called once. No other WHILE loop functions like this: they all test the condition before anything else is done. This an unfortunate error in COBOL's specification.
Although COBOL supports arrays, it is rather clumsy. One-dimensional arrays can be defined but some compilers can not cope with higher dimensional arrays. On those systems which support multidimensional arrays, the handling is difficult and so they are seldom used.
COBOL is a very powerful language suited to applications in business computing. Many of COBOL's limitations, such as no

```
 01   HEADER.
* HEADER1 contains the current date and time

      02   HEADER1.
           03   HD-DATE.
                04   HD-DAY    PIC 99.
                04   FILLER    PIC X VALUE '/'.
                04   HD-MONTH  PIC AAA.
                04   FILLER    PIC XXX VALUE '/19'.
                04   HD-YEAR   PIC 99.
* 99 blanks
           03   FILLER         PIC B(99).

* HEADER2 is the main header

      02   HEADER2.
           03   FILLER         PIC A(14) VALUE
                'PAYROLL NUMBER'.
           03   FILLER         PIC B(27).
           03   FILLER         PIC A(13) VALUE
                'EMPLOYEE NAME'.
           03   FILLER         PIC B(28).
           03   FILLER         PIC A(12) VALUE
                'GROUP NUMBER'.
           03   FILLER         PIC B(4).
           03   FILLER         PIC A(12) VALUE
                'HOURS WORKED'.

* HEADER3 is the underlines for HEADER2

      02   HEADER3.
           03   FILLER         PIC A(14) VALUE ALL '_'.
           03   FILLER         PIC B(27).
           03   FILLER         PIC A(13) VALUE ALL '_'.
           03   FILLER         PIC B(28).
           03   FILLER         PIC A(12) VALUE ALL '_'.
           03   FILLER         PIC B(4).
           03   FILLER         PIC A(12) VALUE ALL '_'.

* The main data line

 01   DATA-LINE.
      02   FILLER             PIC BBB.
      02   DL-PAYROLL-NO      PIC 9(8).
      02   FILLER             PIC B(7).
      02   DL-EMPLOYEE-NAME   PIC X(60).
      02   FILLER             PIC B(8).
      02   DL-GROUP-NO        PIC 9(4).
      02   FILLER             PIC B(13).
      02   DL-HOURS-WORKED    PIC 99.
      02   FILLER             PIC B(5).

 01   WORK-VARIABLES.
* Define END-OF-FILE with an initial value of 0
      02   END-OF-FILE        PIC 9 VALUE 0.
      02   NO-LINES           PIC 99.
      02   TODAYS-DATE.
           03   TD-YEAR       PIC 99.
           03   TD-MONTH      PIC 99.
           03   TD-DAY        PIC 99.

* Define a list of month names as 36 alphabetic characters

      02   MONTH-NAMES        PIC A(36) VALUE
           'JANFEBMARAPRMAYJUNJULAUGSEPOCTNOVDEC'.

* Overlay the array MONTH on the above list of month names- MONTH is defined
* as having 12 3-character elements

      02   MONTH REDEFINES MONTH-NAMES OCCURS 12 TIMES PIC AAA.

 PROCEDURE DIVISION.

 MAIN SECTION.

* First of all, sort the file

 SORT WORKFILE ON DESCENDING KEY WK-HOURS-WORKED
                  ASCENDING KEY WK-PAYROLL-NO
                  USING IN-TIME-SHEET
                  GIVING SRT-TIME-SHEET.

* Get today's date and output the headers to the print file

 PERFORM GET-TODAYS-DATE.
 PREFORM DO-HEADER.

* Open the sorted file and output its data until the end of file has been
* reached

 OPEN INPUT SRC-TIME-SHEET.

 PERFORM OUTPUT-DATA WHILE END-OF-FILE = 0.
```

```
* Close file and stop

 CLOSE SRC-TIME-SHEET.

 STOP RUN.


 GET-TODAYS-DATE SECTION.

* Get today's date and insert it into the report header

 ACCEPT TODAYS-DATE FROM DATE.
 MOVE TD-DAY TO HD-DAY.
 MOVE MONTH (TD-MONTH) TO HD-MONTH.
 MOVE TD-YEAR TO HD-YEAR.
 EXIT.


 OUTPUT-DATA SECTION.

* Read in the data from the input file and output it to the print file

 READ SRC-TIME-SHEET AT END
                     MOVE 1 TO END-OF-FILE,
                     GO TO OUTPUT-DATA-END.

* Place data into the output record and print out line

 MOVE PAYROLL-NO TO DL-PAYROLL-NO.
 MOVE EMPLOYEE-NAME TO DL-EMPLOYEE-NAME.
 MOVE GROUP-NO TO DL-GROUP-NO.
 MOVE HOURS-WORKED TO DL-HOURS-WORKED.

 MOVE DATA-LINE TO LINE.
 WRITE REPORT-LINE AFTER ADVANCING 1 LINE.

* Count this line- if at the end of the page then do next page's headers

 ADD 1 TO NO-LINES.

 IF NO-LINES = 60 PERFORM DO-HEADER.

 OUTPUT-DATA-END.
 EXIT.


 DO-HEADER SECTION.

* Print out the headers after feeding a new page- note that HEADER3 is
* printed over HEADER2 (it contains underscores)

 MOVE HEADER1 TO LINE.
 WRITE REPORT-LINE AFTER ADVANCING 1 PAGE.
 MOVE HEADER2 TO LINE.
 WRITE REPORT-LINE AFTER ADVANCING 1 LINE.
 MOVE HEADER3 TO LINE.
 WRITE REPORT-LINE BEFORE ADVANCING 3 LINES.

* Reset the page count

 MOVE 0 TO NO-LINES.

 EXIT.
```

multidimensional arrays or no extensive mathematical features, do not apply to the business field. Some of the other criticisms, such as COBOL's lack of structure in the procedure division, are more serious. The latest standard of COBOL being developed (COBOL-8X) should address many of these faults by the addition of some more comprehensive control structures and the elimination of some of the more dangerous features of the language.

Whether or not the new COBOL is more in keeping with the modern thought on structuredness, it is likely that the most widespread computer language in the world will be in use for many years to come.

The next instalment will look at ALGOL- the first of the structured languages.

FED UP WITH LONG PRODOS CATALOGS ?

If you have ProDos disks with large numbers of files and don't want to see them all when looking for a particular file don't forget that you can catalog selected files types. eg

CAT,BAS
will list Applesoft files only
CAT,TSYS
lists system files
CAT,TTXT
lists text files
CAT,TAWP
lists Appleworks W.P. files

Apple Bytes

Small tips, hints and stories from around the AppleWorld

The Northern Illinois Computer Society recently published some notes about an Apple User Group Conference which included the following ; "The User Group Purchase Plan will allow user groups that meet a rigid criteria, the opportunity to purchase certain Apple products for User Group activities. Groups meeting the criteria will be able to purchase single quantities of equipment at developers prices (typically 50% of list prices)."

"Apple Inc also have a new licensing agreement on offer to User Groups, the agreement effectively allows User Groups to sell certain system software to their members. Software included in the agreement includes DOS 3.3, ProDos 8, 16, Mac System, Mac Printer Installation, and some tools for the Mac. Further extensions to the agreement will allow User Groups to offer updates to its members for the above software, for a fee (to Apple), this feature should reduce the delay between updates appearing and users gaining access to them."

This system still does not operate in the U.K. - we thought you would like to see what happens in the United States where User Groups have special relationship with Apple.

I/O ERROR MESSAGES ?

Sometimes when using DOS 3.3, the dreaded "I/O ERROR" message appears during attempts to CATALOG, LOAD or RUN a program. If you have this problem try the following remedy which disables part of the error checking routine when DOS reads from disk. Enter "POKE 47426,24" and a read may then be successful, if it is avoid repetition of the problem by saving the file/program on a new disk (nb ensure that you reboot before initialising any disks).

CHICKAMAUGA and ANTIETAM

Tom Wright goes back to the U.S. Civil War and finds out how hard it is to win!

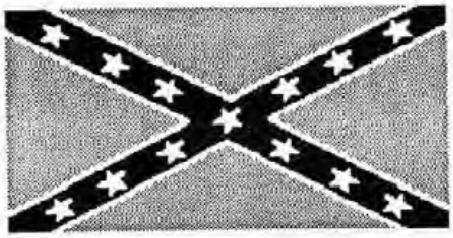
This month I have been testing two more SSI wargames both of which offer opportunities for many hours of enjoyment to wargamers. Both game scenarios are based on battles of the American civil war period, with very similar features which facilitate their joint coverage.

I am happy to report that the poor error trapping which was evident in the Warship game that I reviewed last issue is not evident in either of these games. I did not in fact find any sign of poor programming. The manuals provided with both games are up to the normal SSI items and must be regarded as excellent. All features of the games are covered in depth in a manner which is easy to follow.

'Rebel Charge at Chickamauga' and 'Battle of Antietam' are the games that I have been testing, purely out of dedication to the club you understand! Both games are presented in attractive boxes containing a manual, one disk, and a laminated map card.

The review copies were suitable for 48k Apple II+, IIe or III and versions are available for Commodore C-64, Atari and IBM machines.

During play I found the visual appearance of the Chickamauga game slightly more attractive and it has one or two features that are lacking in the Antietam game. This type of game may appeal to chess players since it represents a more complex form of chess. The feature which may not appeal to keen chess players is the 'random' determination of attack and defence effectiveness during combat periods. I found that the random routines really do work, it is possible to achieve different results when replaying a given tactical situation which has been previously saved to disk.



The ability to save both games to disk is a very necessary feature as a game can easily occupy fifteen hours. Playing time can be reduced if you have an accelerator card in your machine.

Both games offer three levels of difficulty, Beginners, Intermediate, and Advanced, if you buy one or both of these games and haven't played anything similar before I strongly recommend that you begin at the beginners level. At the Advanced level both programs will give you a pretty tough game. Of the two, I think that Antietam is the most difficult which is about what would be expected from a scenario wherein the Union forces have a two to one advantage in numbers. Achieving a major win in either game is a real challenge. The player is offered the choice of controlling Union or Confederate forces in both games with fairly accurate representation of force strengths. If you enjoy a real challenge choose the Confederate side in both games.

The following comments are based on the Chickamauga game with reference to differences between it and the Antietam game where appropriate.

Entry into both games is via a generally similar sequence of player's options which in the case of the Chickamauga game include the ability to utilise an accelerator card. Chickamauga also offers a demonstration game option, a facility which is not offered in the Antietam game. Both games have a feature which allows the player to recall a previously saved game from disk, or play a new game. Chickamauga includes facilities for weighting Corps and Divisional command which are not included in the Antietam game but in most other respects both games have similar start-up facilities including a choice between 'hidden' or 'non-hidden' units. Selecting 'hidden' units can liven the game up considerably in terms of reproducing the effect of 'encounter' engagements.

The Chickamauga game has the option of silent play a feature which will doubtless be much appreciated by other members of the family during the early hours of the morning. Colour and monochrome displays are selectable, as is a 'time limit' mode, and the player is able to choose between Icon and Symbol representation of each unit.

Choice between Icons and Symbols is associated with one of the differences between the two games as the Chickamauga game includes two levels of display during the game. The 'normal' display is a tactical map which can display Icons (ie men, cannon, horses). The player can also look at a large scale map on which units are represented by symbols. The Antietam game only offers the tactical map display.

In both games reinforcements appear at intervals during the game on designated map locations, with the Union side receiving more reinforcement than the Confederate one. The laminated maps supplied are extremely useful and offer more detail than those displayed on screen in terms of ground elevation, wooded and open ground. What's elevation got to do with it ? elementary my dear Watson, the simulation of ground elevation can often result in units being able to approach enemy units in safety due to the fact that they are in 'dead' ground and cannot be seen by the target unit(s).

It is possible to carry out limited reconnaisance of enemy units although the information

that is obtained does not extend beyond an 'approximation' of the unit's manpower and gives no guide to it's morale or fatigue ratings, both of which significantly affect combat efficiency. Apart from the limited amount of information which can be obtained during a reconnaisance the player is allowed a strictly limited number of reconnaisances during each game move.

A player may change the directional facing of each of their units, move units in any of nine different directions, build fortifications, identify units belonging to a particular brigade, select unit advance in the event of successful contact, designate units to engage in melee, check line of site from selected units, split units into sub-units, and many other features. Anyone selecting 'double time' rate of advance will be well advised to consider the relative merits of arriving quickly with an exhausted unit, and arriving more slowly with a unit which is not fatigued to the point of losing much of its fighting effectiveness.

Hints and tips

• If you choose Battle of Antietam don't try to replay history by hanging on to the sunken road. Get some units across the creek in the north and use the Dunker church as a pivot.

• If you elect to charge at Chickamauga don't beat your brains out trying to force your way across the creek by Lee & Gordon's Mill in the early stages. Demonstrate around McAfee's church and manoeuvre via Kelly's and Brock's fields.

Both statements assume that you elect to play the Confederate side. In the event that you find your forces decimated keep your letters of complaint to yourselves, serves you right for listening to me!

I thoroughly recommend both games.

info

Product: Rebel Charge at Chickamauga
Publisher: Strategic Simulations
Available from:
MGA MicroSystems
Bidmuthin Technologies

Price: £?

Value: ?????
Performance: ●●●●●
Documentation: ●●●●●

info

Product: Battle of Antietam
Publisher: Strategic Simulations
Available from:
MGA MicroSystems
Bidmuthin Technologies

Price: £?

Value: ?????
Performance: ●●●●●
Documentation: ●●●●●

Notes •n Files

Vic Jones reviews Notes •n Files - a simple filing and text editing system for the IIGS

What is *Notes •n Files*? DATAPAK, in the introduction to their Instruction Book say that it is software written in response to a common requirement of most people who would like to 'be able to keep track of some names and addresses and write these people a letter now and then, or maybe just jot down a memo and file it away...'

Well that is certainly a need that most people feel. We all, in both office and home, need to keep, in various degrees of order (and disorder), all sorts of information, scruffy notes, letters to friends and businesses, memos of all sorts, addresses, telephone numbers, the name of the horse we backed last Friday and the odds we got at the time.. We want to keep track of the supplier of that last lot of electronic goodies and the date our driving license expires. So many things.. and we are all crying out for someone, or something to keep that whole lot in good order.. Not much use having the information if we cannot find it again when we really want it.

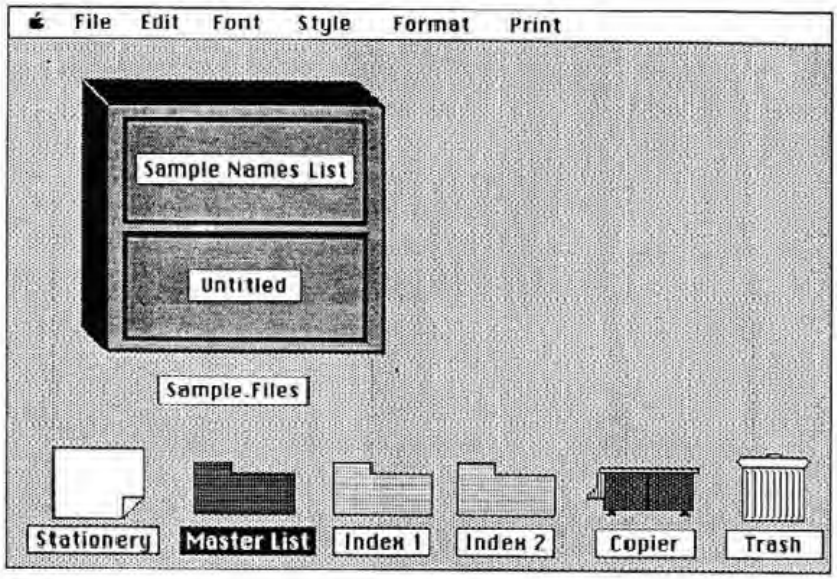
I do think, though, that DATAPAK have rather understated the capabilities of *Notes •n Files* in that introduction. it is capable of much more than keeping a few rough notes in order.

Just as in an office or home paper filing system, *Notes •n Files* uses filing cabinets, drawers and folders for filing all this stuff. In return for a little care in choosing the titles of these imaginery cabinets, drawers and folders this easy to use software will keep your files in good order and will be able to find the information you want when you want it. Its text editing facility will allow you, to write notes, memos, letters, reports etc. and print them out on your printer. It will address the envelopes, make ordered lists and indexes, find folders on same or similar subjects and allow the printing of form letters. The ways in which it may be used depend very much upon the limits of your own imagination. All that you have to do is to stay within the rules laid down in the instructions. Perhaps it is not so much that you have to stay within the rules as that you must be prepared for *Notes •n Files* to impose the rules upon you. Like all well written software *Notes •n Files* will trap most of your errors and operate around them.

I liked the way in which I was able to enter the system with minimal assistance from the instruction book. DATAPAK have clearly aimed the software at users who are new to computers and they have tried to make the operation of the system as simple and as foolproof as possible. I think that they have succeeded in their aim. Perhaps the graphic representations of filing cabinets and folders etc. are not 100% necessary but they certainly do away with the need for titling and similar explanations and they are easy to get used to.

The Instruction Manual is comprehensive and easily understood. My only complaint was over the Data Entry section where considerable emphasis was placed on saving disk space by making proper use of abbreviations. All well and good but some of the abbreviations would be confusing in these islands since they were entirely U.S. usage. I suppose that I should not complain of US software writers writing for the American market. They do live there, after all, and without doubt that market is the biggest one around at the moment.

Well, what about the use of the software itself...? One cannot just read the instruction book and then write a review.. One has to spend a lot of time actually using the software. That is the way one discovers the things that will get up a user's left nostril.



The *Notes •n Files* main screen.

DATAPAK say that you need an APPLE IIGS with at least 512k of memory, a 3.5 inch disk drive, of necessity, because *Notes •n Files* lives on and operates from a 3.5' disk but you can use 5.25' disk drives for data only. They advise having a second 3.5' disk drive for convenience, so that you do not need to swop disks back and forth, and, for the truly rich, and busy, they reckon a hard disk would be a good idea.

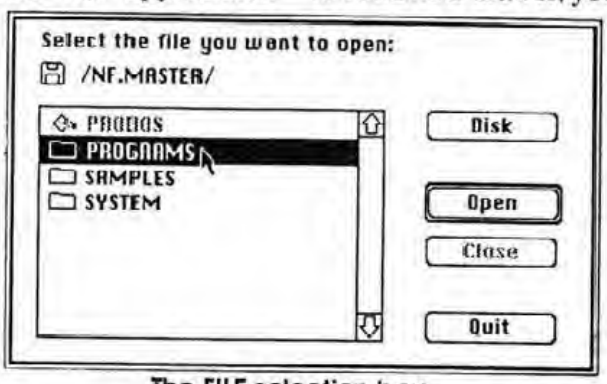
I initially viewed these requirements with some alarm because it looked as if the system was pretty well drive-based and my own sys-

tem is a bog-standard IIGS bundle consisting of APPLE IIGS, with a 1 megabyte Memory Expansion Card, color monitor and a single 3.5' disk drive. Hooked in, also, is one of my old 5.25 drives.

I need not have worried. After I had organised memory properly my system worked splendidly. My first,and only, glitch occurred because I had not appreciated that *Notes •n Files* would do all the setting up that was necessary. For speed I always use the memory expansion card as a Ramdisk, setting aside a whole 3.5' disk's worth (800K) for this purpose. I forgot to adjust the amount of Ramdisk allocated and *Notes •n Files* would not complete the boot. When I set the Ramcard properly things started to happen.

Then it was just a matter of mouseclicking for first 'PROGRAMS' and then '*Notes •n Files*' and I was into the main screen which shows the two drawer filing cabinet and a selection of icons. The latter give access to the STATIONERY store, the file Master List for the two drawers, two different Index options, the printer (which for some weird reason they call the 'Copier') and the trash can. A double click on the label on the top drawer opened the drawer and showed some sample folders stored within. They were nicely organised in alphabetical order. Clicking on the little triangles fingered through the folders either from front to back or from back to front. A click on the little square shut the drawer again. Easy.

At the top of the screen is the usual sort of selection menu giving filing, editing and printing options. Mouseclicking does all the selection. For instance, if you wish to rename a drawer, you only need to open that drawer, mouseclick for 'Rename Drawer' in the 'Edit' menu and then type in the new name.. Mouseclicking on the 'OK' button or a swipe at the 'RETURN' key accepts it and there you are. Folders can be renamed just as simply.



The FILE selection box

At this point, not wanting to mess up the disk that had been loaned to us by MGA SYSTEMS, I write protected it and set out to make a separate data disk of my own with my own trial cabinets and folders. *Notes •n Files* is a protected disk but, once booted, the master disk need never be used.

This was easily done by closing the cabinet I was working with, selecting 'New Cabinet' which allowed me to choose a suitable title. Changing the disk for a new formatted one and clicking on the 'Disk' button produced the answer. After that it was a simple matter, although a rather lengthy one, to put a lot of make-believe folders into one of the

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GraphicWriter	108.99	Shanghai	21.73
Data Bases		Tass Times	21.73
Softwood File	128.64	Myraglen Tower	44.95
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ProDOS-16 Reference	26.95	GS-RAM 256K	149.00
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GS Tech. Introduction	9.60	Joystick	18.99
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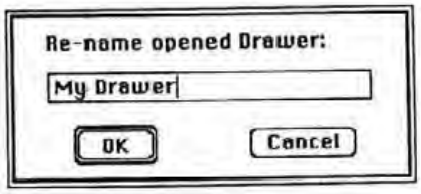
drawers just to try out the capabilities of the software.

Slightly confusing is the use of the word 'folder'. They use the word to describe the divisions into which you will, eventually, divide



each of your disks. These are 'disk folders' and, oddly enough, will contain the 'filing cabinets' you create. For instance you might decide to label one of the folders on one disk as 'Accounts'. Inside this folder might be put a series of cabinets such as 'Income', 'Income Tax', 'Investments', 'Bills', etc. The Bills cabinet, for instance, then might contain 'folders' titled 'ACCESS', 'Gas', 'Electricity', etc. Making folders allows you to organise your cabinets into groups of subjects if you so wish.. (You needn't, of course, the way you organise your cabinets and files is entirely up to you).

You can put disk folders inside disk folders inside disk folders. This system can cope with some very complicated minds. As I said earlier, the system you produce can be tailored specifically to your own personal needs.

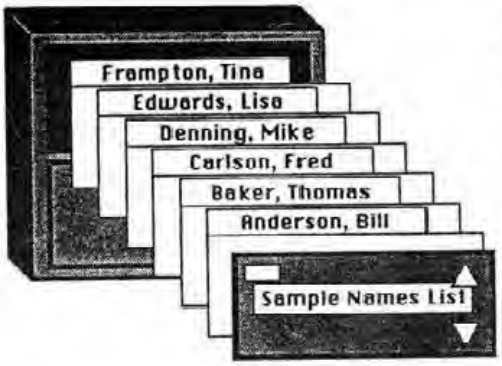
Finally, each drawer can be given a suitable name chosen by you yourself. I noted that after I had created my new cabinet named VIXFILES the cabinet selection window showed the disk as holding THREE files - VIXFILES, VIXFILES.A and VIXFILES.B. The two extra files are essential to the operation of the cabinet. They contain the indexes, or is it indices..? Should one ever need to transfer a cabinet over to another disk one is warned that all three files should be transferred.

The folders in either drawer can be listed by clicking on the MASTER LIST icon. The list may be scrolled using the 'thumb' rectangle at the side or one can use the UP or DOWN arrows. Similarly the contents of each of the folder fields can be viewed by scrolling sideways. When you create a new folder you can either use the existing field format or you can specify fields that suit your purpose more exactly.

A folder can be chosen directly from this list. Just double-click on the title and the folder will instantly 'fly' out of the Drawer and appear on the screen. Once inside a folder you can find and open a document by either using 'dog-ears' on the document icons or by double-clicking on a document name in the folder log.

The search facilities are highly flexible allowing the selection of single folders or lists of folders which are based on your own entries in the folder fields. Sorts can be applied in many ways and there is a useful capability of sorting in either ascending or descending alphabetic order. As I emphasise continually, much depends on your original title and folder field choices.

For a search you can specify conditions that will provide you with a list of folders that satisfy the conditions.. The system supports either AND or OR requirements as well as giving you the option of using a set of conditions



formulae that allow:

- •Exact match
- •Any occurrence
- •Equals up to given values
- •Lesser then
- •Greater than
- •Lesser than or equal to
- •Greater then or equal to
- •Not equal to
- •Not equal to any occurrence

Use of these will allow you to find folders bearing the names of, for instance, everyone you know in Swansea. Or a list of all the folders with names starting with a given range of letters. Or all folders with the word SMITH anywhere in the title. Or with titles beginning with SMITH. You could, for instance, also find folders covering details of all SMITHs working for a particular company.. There are many other possibilities.. I would not have space to cover all of those available but a simple and useful routine is to place the date of creation of each folder in the appropriate field which gives one the option of calling for 'all documents created after such and such a date'. Suffice it to say that the search capabilities are extensive.

Search speeds were pretty good with the numbers of folders I used. I just did not have the time to test out cabinets containing thousands of folders so I cannot say how well the system performs with very large numbers of folders. However, if search times become too long, one can always rearrange the drawers so as to reduce the search ranges.

It is important to remember, though, that *Notes •n Files* will find the folder for you but it leaves it to you to sort through the documents in that folder until you find the right one. This is not as difficult as it may sound because you are unlikely to have all that many documents in the one folder. If one does start to get overfull there are certain to be ways of splitting the documents into more folders. A document name is limited to 19 characters and this should be ample for most purposes.

Of course you can put as many or as few documents into your folders as you wish. Similarly you can put just a few or very many folders into a drawer.. There are obviously limits, though. The system works just like the storage arrangements in your office. If you use very thick files with lots of documents in them you will find after a bit that you are going to run out of drawer space. You can have lots of thin folders or nothing like so many thick ones.

More care is necessary than one might think when choosing titles for cabinets, drawers and folders. To achieve the best results one needs to bear in mind that your own truly hierarchical system of filing depends on your own choice of title. The arbitrary limit of 17 letters for folder titles tends to cramp the style of a wordy person like me but, in fact, should be enough to enable one to provide satisfactorily descriptive titles for a wide range of files.

DATAPAK say that one can import data from other data base programmes directly into *Notes •n Files*. I was not able to try this but judging by the way that the rest of the package works, I have no doubt that it will do it effectively. I note, however, that the instruction book counsels care in carrying out the procedures. This is clearly a useful thing to be able to do but there are hazards for the careless. Isn't that true of most of our computing tasks though? I know of no better training in self-discipline than the regular usage of a computer system.

One can also 'export' a file. Thus you can create a text file on a disk that can later be used by other IIGS programmes. I found this easy and it is a useful thing to be able to do.

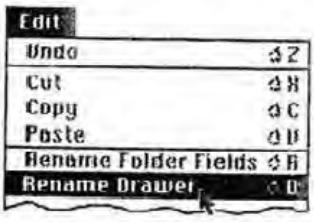
Of course there is a method of removing folders and documents from the system. Just drag them across to the trash can.

Finally, if a window gets in your way, you can move it around the screen to where it is less of a nuisance. I found this to be a most useful facility from time to time.

So far I have concentrated upon the database aspects of *Notes •n Files*. It is here that I believe the true usefulness of the programme lies. Nevertheless, one needs a word processing capability to achieve entry of data into one's database. The Text Editor does all that I would expect of it. It provides two fonts and three sizes of print and supports copying, tabbing and cutting and pasting. It is capable of carrying out all the normal justification routines. It did all that I required of it and showed no vices.

The stationery store was handy. Not only could I drag out a new blank folder from it but it also contained an inexhaustible supply of paper for letters etc. in four useful sizes, letter size, legal size, wide paper and 3x5. Printing can be organised by use of one of the indices.

To print one's letter or memo one needs only to drag the document icon from the folder down to the Copier icon. The Copier window then appears and allows one to choose from four printer options and three qualities of print. Page numbering may be selected and multiple prints organised. There is likewise no difficulty in printing out selected individual pages from a document. Printing begins immediately one clicks on OK or hits <RETURN>. An ABORT is available at any time. Just press <ESCAPE>. Mailing labels and Form Letters are no trouble. *Notes •n Files* has a built in MAIL MERGE capability. It can take names and addresses from the folders and insert them,



as required, into your form letters.

To give some idea of the size of the Address List one could employ, DATAPAK say that a simple system containing nothing but names and addresses might contain 'a few thousand' folders.

A nice feature is that, once a folder has been used for printing a label or form letter it can be 'flagged'. A record of the date is included in each folder. One can thus send part of a set of letters off one week, and the remainder the following week, without the risk of duplication.

All in all a well-behaved piece of software with considerable potential. Because it allowed me so much scope for my own development of my own sort of filing system I liked it a lot.

info

Product : Notes •n files
Publisher : Datapak Inc.
Available from :
MGA MicroSystems

Price : £ 99.99

Value : ♦♦♦♦
Performance : ♦♦♦♦♦
Documentation : ♦♦♦♦♦

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ABOUT WHEN

A ProDOS based fribble from Jim Harle

Having recently purchased Micol Assembler from Shop2000, it was soon noticed that this useful product didn't date and time stamp files created under the ProDOS version. Maybe that's because my //e has no vacant slot to house a clock card. I've grown used to setting current values at the beginning of the session anyway. So, although Basic is somewhat of a foreign language to me, an attempt to overcome this minor irritation was clearly called for.

On loading 'Startup' from a work disk derived from the master supplied, an extensive program from previous experience, it quickly dawned that the ProDOS Utilities 'T' option was not included. In fact, you could count the lines of Micol's version of the program on your fingers!

The first solution that came to mind was to lift the setting of time and date from the utilities disk and insert it into the mini-Startup. That worked, but the rest of the program was so swamped by the sheer size of the routine that the result wasn't aesthetically pleasing.

Further investigation produced new insights, leading eventually to the modified program listed below. In short, four valid decimal numbers poked will cause the files to be dated and timed. Get the right numbers, and the files get the right date and time.

In persuit of the trivial, the first of the numbers was found to be fairly constant, Twice a year only, on 1st January and 1st August, it increases by one. For January-July 1988 it will be double 88, which is 176. Anyone who, given how many days there are in a normal year, is capable of computing the number of days in a leap year will readily ascertain the value of the first byte fro August-December 1988. And, no doubt, subsequent periods to the end of the century.

The second value is easily obtained by adding the day of the month to the product of the number of the month (modulus 8) and two raised to the fifth power. Alternatively, you can look it up in the table below.

As the third number is simply the hour as per the 24 hour clock and the fourth is the number of minutes past the hour, the total effort involved isn't too great. While this means of entering the ProDOS time and date is more prone to user error, you can still count the program lines on your fingers (just). It might be worth the occasional extra use of open-apple-control- reset or whatever.

Perhaps by now the Chairman/Editor is regretting the encouragement contained in his editorial for Apple II users to submit material. However, I enjoyed these discoveries, have the satisfaction that results from properly dated Assembly Language files, and learned a little along the way into the bargain.

```
]LOAD STARTUP
]LIST

10 D$ = CHR$ (4)
20  PRINT D$;"PREFIX"
30  INPUT "";PREFIX$
40  PRINT D$;"PR#0": POKE 336,255
    : HOME
50  PRINT "WELCOME TO SYSTEM M200
    0, THE MACHINE LANGUAGE DEVE
    LOPMENT SYSTEM, PRODOS VERSI
    ON": FOR J = 1 TO 500: NEXT
    J
60  PRINT "ENTER PRODOS DATE IN O
    RDER YYM,MDD,HH,MM(4 DECIMAL
     NUMBERS SEPERATED BY COMMAS
    )": PRINT
70  INPUT YM%,MD%,HH%,MM%
80  POKE 19041,YM%: POKE 19040,MD
    %: POKE 19043:HH%: POKE 1904
    2,MM%
90  PRINT D$;"-MMENU"
100  END
```

Table to determine 2nd byte for ProDOS Date Pokes

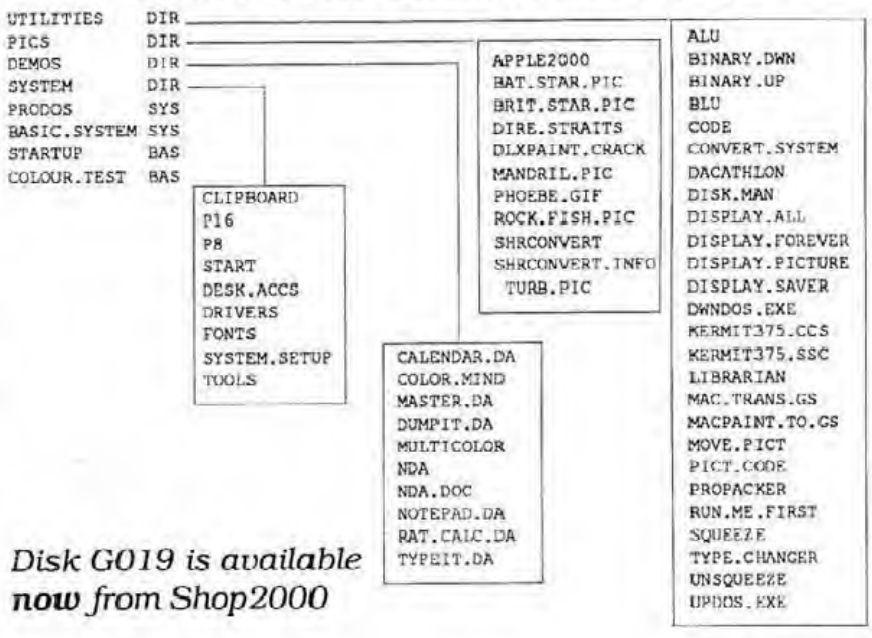
	Jan Sep	Feb Oct	Mar Nov	Apr Dec	May	Jun	Jul	Aug
1	33	65	97	129	161	193	225	1
2	34	66	98	130	162	194	226	2
3	35	67	99	131	163	195	227	3
4	36	68	100	132	164	196	228	4
5	37	69	101	133	165	197	229	5
6	38	70	102	134	166	198	230	6
7	39	71	103	135	167	199	231	7
8	40	72	104	136	168	200	232	8
9	41	73	105	137	169	201	233	9
10	42	74	106	138	170	202	234	10
11	43	75	107	139	171	203	235	11
12	44	76	108	140	172	204	236	12
13	45	77	109	141	173	205	237	13
14	46	78	110	142	174	206	238	14
15	47	79	111	143	175	207	239	15
16	48	80	112	144	176	208	240	16
17	49	81	113	145	177	209	241	17
18	50	82	114	146	178	210	242	18
19	51	83	115	147	179	211	243	19
20	52	84	116	148	180	212	244	20
21	53	85	117	149	181	213	245	21
22	54	86	118	150	182	214	246	22
23	55	87	119	151	183	215	247	23
24	56	88	120	152	184	216	248	24
25	57	89	121	153	185	217	249	25
26	58	90	122	154	186	218	250	26
27	59	91	123	155	187	219	251	27
28	60	92	124	156	188	220	252	28
29	61	93	125	157	189	221	253	29
30	62	94	126	158	190	222	254	30
31	63	95	127	159	191		255	31

Jim's program can easily be modified to be used with other applications - the important part is contained in lines 60 to 80. If you don't want to have to refer to the lookup table, change the program as follows and the figures will be automatically computed.

```
60  PRINT "ENTER PRODOS DATE/TIME
     AS DD,MM,YY,HR,MN(5 DECIMAL
     NUMBERS SEPERATED BY COMMAS
    )": PRINT
70   INPUT DD%,MM%,YY%,HR%,MN%
72 YM% = (YY% * 2) + (1 * (MM% >
    7))
74 MD% = DD% + (32 * (MM% - (8 *
    (MM% > 7))))
```

Graham Attwood

GS SOFTWARE LIBRARY DISK No. G019



Disk G019 is available ***now*** *from Shop2000*

Random Impressions of Los Angeles

by Nigel Strudwick

One very lucky member lands in the centre of the AppleWorld!

I was recently offered the opportunity to teach in the University of California, Los Angeles (UCLA) for a year. Such events are rare in my field, and thus I jumped at it. Now the USA is frankly not a country that has ever been high on my list of places to visit; however, much to my surprise, I have been very impressed with the place. Los Angeles is as big or bigger than everyone says it is, and it has some very nice parts to it.

But we're here for computers, not travelogues. For an Apple enthusiast, California is of course the centre of the world, and the prospect of using the Macintosh on its home ground (as it were) was rather appealing. Certainly the chairman of Apple 2000 would gladly have gone in my place! Now I am afraid that at the moment, most of my comments are going to concern the world of academic computing, but I am hoping soon to get out into the real world and see what is going on there.

The computing difference between this university and Cambridge in England was brought home to me on my first day here. I was taken into the student store, principally to check up on the textbooks on my course. Imagine my surprise to find there a more or less fully-equipped shop selling Apple products to students and staff. Here they do not deal with designated dealers; you can buy the stuff actually on the campus. And they are not just selling the Mac Plus; everything is there, including the Mac II and the Laserwriter. They are more or less available off the shelf. A usable Mac II retails here (with university discount) for about $4330, which, even with duty and VAT is less than I would pay at home. Now if only I hadn't bought that Mac Plus earlier in the year...

The difference is also apparent around the departments. Nobody here buys crummy little computers like the BBC micro, but rather most departments have Macintoshes and IBM's (unfortunately). My department has a Mac SE and two 512k models, which are in the process of being upgraded; a Laserwriter is coming in the very near future. In England, my equivalent department is still trying to come to terms with mainframes, never mind micros! UCLA currently has a scheme for giving each of its regular academic staff their own micro to use in their office. Part of the idea seems to be to encourage academics to work more in their departments, rather than remaining invisible at home!

Thus all the time one is coming into contact with people who use Apples in their daily existence. Despite the still dominant position of IBM, there are a lot of Macs around and growing rapidly. Now if only I'd brought mine from home instead of being bothered about the amount of luggage I might have to carry....

Eds Note: Thanks to Nigel for writing to us. I look forward to further news from the Apple mecca.

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Diversi-Cache

Dave Ward takes a look at a Share-Ware Product for the GS in the first of a new series.

This is hopefully the first of a short series of reviews of four 'ShareWare' programs from Diversified Software Research Inc. (DSR). Many of you will, no doubt, remember Diversi-DOS which was first published in 1982. Diversi-DOS was not the first such 'fast DOS' but it was and is almost certainly the best and has the most enhancements. In 1983 Diversi-Copy a very fast 5.25" diskette copier appeared and then in 1986 when the Apple IIGS appeared DSR produced Diversi-Key a RAM resident keyboard macro facility which allows up to 100,000 macros to be defined in up to 320K bytes of RAM. The object of this review is Diversi-Cache for the Apple IIGS.

All software produced by DSR is supplied on 5.25" diskettes and is copyable using normal copiers. To save costs the 'manual' is contained in a textfile on the disk and the user is prompted to print this 'manual' when the diskette is booted. Listed below is the first page of a typical 'manual', in this case Diversi-Cache!

```
Diversi-Cache (tm)
By Bill Basham
Copyright 1987 DSR, Inc.
Version 1.0
INSTRUCTIONS

PLEASE COPY THIS DISK AND GIVE IT TO EVERYONE YOU KNOW!

It is legal to copy and distribute this disk. However, to legally use the
Diversi-Cache program on this disk, you must send payment within 2 weeks.
Please send $35 directly to:
DSR, Inc.
34880 bunker Hill
Farmington, MI 48018-2728

You will receive a user support number, and a new disk with the latest
version of Diversi-Cache. Your honesty will help us distribute future
programs in this same, low-cost way.
```

To distribute software in this manner the diskettes must be easily copied. As Bill Basham, the author of DSR programs, has been vending software in this fashion for over 5 years it must be viable. Although the number of pirated copies of the programs must be greater than for normal software the greatly increased exposure will ensure sufficient genuine purchasers. Before diversifying Bill Basham used to write some of the most secure copy-protection schemes - you won't find virtually any nibble copiers that will copy them!! Perhaps copy-protection doesn't really pay after all?

System requirements:

You will require an Apple IIGS with at least a 256K byte memory card in the special expansion slot. At least a megabyte would be better though. Diversi-Cache will only work with the 'dumb' 3.5" drives supplied with the Apple IIGS. It will not work with the UniDisk 3.5".

Diversi-Cache can be invoked by BRUNning the binary file SACHE on the master diskette from ProDOS or DOS3.3. It installs itself into the lowest 256K memory bank in the expansion RAM and tries to produce a RAM buffer of up to 800K bytes if there is enough free RAM. It also installs a setup program in the Desk Accessories menu :-

Control Panel
Alternate Display Mode
Diversi-Cache
Diversi-Hack
Quit

If you choose the Diversi-Cache option you see the following screen:-

```
Diversi-Copy(tm)
Copr. 1987 DSR, Inc
By Bill Basham
Version 1.0

  | Maximum Buffer Size: 800K |
  | Cache Drive: 1            |
  | Enabled: Yes              |
  |                           |
  | Select: <-  ->  |  | Save |

DSR, Inc
34880 Bunker Hill
Farmington, MI 48018

313 553-9460 (Price: $35)
```

This little program allows you to alter the buffer size, switch Diversi-Cache on or off and allow drives 1,2 or both to be cached!

Diversi-Cache works in two main ways to speed up reading data from 3.5" diskettes and one way to write data. The read speed is approximately tripled as Diversi-Cache reads a track at a time rather than a 512K byte block that ProDOS reads. Writing is just about doubled since data is written back a track at a time.

If you have a RAM buffer data read from the diskette is stored in the RAM buffer and the next time it is read it comes from RAM (just like a RAM disk).

You will see from Table 1 that Diversi-Cache does markedly improve both read and write times. Note, however, that files that are badly organised on the disk will spoil the performance somewhat because of head seeking time. If you are using files often it is a good idea to save them to a new diskette so that their blocks are contiguous.

When you set up Diversi-cache try to make the buffer as large as you can (up to the maximum of 800K bytes). The Diversi-Cache buffer is mapped to the disk in

Operation	No Cache	Cache operational First access	further accesses
Boot Micol Macro	50.2	18.1	–
Boot AppleWorks 2.0	26.2	11.1	4.0
Boot Tass Times in Tone Town	21.4	9.0	3.5
Load 23 super-res pics (32K each)	150.1	42.4	15.2
Load 26K Applesoft program	3.7	1.9	0.5
Save 26K Applesoft program	7.3	3.6	3.7
Load AW database (49K)	7.6	2.3	1.5
Save AW database (49K)	12.0	9.1	9.1

Table 1

that a half-sized buffer (400K) will only work for the first half of the disk! If you only expect to use part of a disk then adjust your buffer size accordingly.

Please note that Diversi-Cache only works with the 'dumb' 3.5" drives for the Apple IIgs. If your drive(s) are unidisks then Diversi-Cache won't make any difference.

Diversi-Cache is, in my opinion, an excellent product that makes working with ProDOS 16 (slowDOS) bearable!!

GS HOT TIP

Before you buy one of the new piggy-back ROM cards or battery-backed up RAM cards for the GS, check out the 'Memory Saver' from Checkmate Technologies. It is a device that goes between your expansion RAM card and the socket on the motherboard and provides a battery power supply to the card when the machine is switched off. This means you can convert an ordinary RAM card into a rewriteable and partitionable RAM/ROM memory area which can be booted from at switch on. Priced at around £120 it will make real ROM cards unnecessary.

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2. **RETURN to EDEN**
3. **WORM in PARADISE**

These games generally have a good vocabulary not included in many of the earlier adventure games of this sort, with the unfortunate and sometimes annoying omission of elementary words (polite words of course)! The manual/novella supplied although well presented contains very few helpful hints as it is combined with an incomplete description of the keyboard commands and a story that leaves you none the wiser to what the game entails. The earliest of my problems was trying to find the objective of the game. But even with this minor snag the 1st part (Snowball) did prove to be very enjoyable and quite addictive, and subsequently this led to discovering the end goal of this first part.

Actual play was quite speedy with the added bonus of being able to input instantly on arrival at a location, without having to wait for the graphics to be displayed. The graphics themselves were not the greatest I have seen and did not really add much to the story or help at any location in solving problems and at certain places proved highly distracting. Commanding your way around the maze is quite easy with a near-English sentence construction allowed, as well as very short direct commands including numerous single character inputs. The maze structure was interesting and well thought out in providing an easy labyrinth of passages to become totally lost in and also making it easy to believe that there are over 13 million locations.

A very welcome facility is the 'HELP' command and although leaving you on your own for much of the time, proved invaluable in some sticky situations. I think that the help command should be available at all times for use at the discretion of the adventurer and most certainly not just available at the whim of the games designer.

The other two games have the same facilities structured around a different maze and each with yet more elusive objectives, though as of yet I have been unable to conquer the initial problem of not dying - repeatedly!

My ratings:

Product	Silicon Dreams
Publisher	Rainbird
Available from	Rainbird Software Wellington House London WC2H 9DL
Price	£19.95
Value	***
Performance	**
Documention	***

Neil Hartley (15)

JEWELS of DARKNESS

A dungeon based trilogy of taxing adventures by LEVEL 9 under the British Telecom Rainbird logo for the Apple II computer.

I) Colossal Adventure
II) Adventure Quest
III) Dungeon Adventure

The Vocabuary is quite large but needs more words like USE, LOCK etc. HELP which could be of immense value is unfortunately not because most of the time it says pathetically "Sorry you're on your own here." and leaves you with nothing to do except go North, South, East or West etc., and die of course. OOPS! helps if you die....you can relive!

The Book supplied with the games is quite helpful giving you starting guidance and basic commands. The book also gives you the basic background of the story in each case, but I find the book concentrates too much on the background and not on the actual game making it slightly harder to play.

I) Colossal Adventure :

It is quite hard to get anywhere but after hours of work you should finally succeed.

II)Adventure Quest:

It is very hard to get anywhere in this one even after hours of painstaking work.

III)Dungeon Adventure

You need even more work to figure out a way to set alight a heavy and wet piece of driftwood.

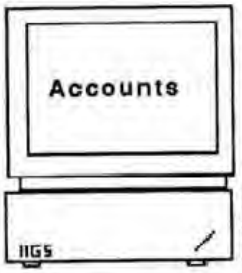
My ratings:

Product	Jewels of Darkness
Publisher	Rainbird
Available from	Rainbird Software Wellington House London WC2H 9DL
Price	£19.95
Value	**
Performance	**
Documentation	***

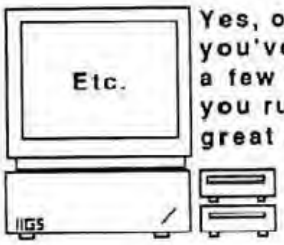
Alan Hartley (12)

Editors Note:
Thanks to Neil and Alan for taking the time to review these games - it is nice to see two youngsters giving their peers a lesson in suporting the group.

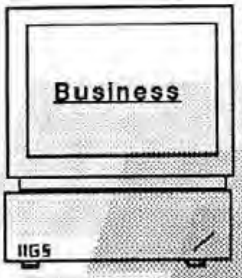
Bidmuthin's A-Z of //GS solutions.



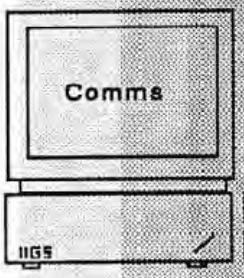
A complete GS accounts system, seamlessly integrating sales, purchase and general ledgers with invoicing from stock, stock control & management reports. Brilliantly easy to use and fast. Designed for the non accountant. Options include RAMcacheing & macros.



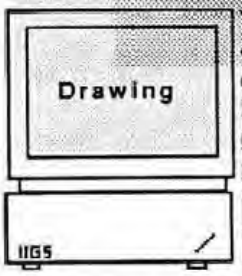
Yes, once you've drawn a few boxes you run out of great ideas. Or do you?



Based on AppleWorks expanded and enhanced with as many options and utilities as you need: Spelling Checker, Macros, Comms, Graphs etc. etc. All fully installed with mousedesk & selector to give a price/productivity performance few other systems can hope to match.



An answer to the 'joys' of trying to communicate with the outside world. Datalink, an internal, 1200/1200 baud Hayes compatible AA/AD modem complete with software. Also external modems and a variety of software.



TopDraw is a magnificent drawing program for the //GS only. It is object orientated, with masses of features. Like a colour version of MacDraw. Integrates with Multiscribe for desktop presentations.

Filing
Graphics
Hard Disks
Integration
Joysticks
Hard disks
Konsultancy (we may be good technically, but lousy at spelling)
Linking
Music & Multitasking
Number crunching &
Networking
Options
Printing
Quality support
RAM
Science
Training
Utilities
VIP Professional
Word Processing
Xtra memory
Zork Trilogy - after that lot everyone needs a break!

These are just some of the systems we can offer. If you have a problem, why not let us recommend an answer. We guarantee it will meet your requirements.

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MICOL MACRO

Dave Ward previews a new Assembler for the Apple IIGS

Remember Micol Basic which was reviewed back in the August 1986 issue of Apple 2000. Well, Micol Systems of Canada promised a macro assembler for the Apple IIGS and a new BASIC language specifically for the Apple IIGS even though the original Micol Basic works anyway.

Micol Systems supplied Apple 2000 with a copy of Micol Macro which I have been loaned to review. Since I have only been using the product for a couple of weeks I present a preview rather than a full review which it is hoped will be ready for the February or April issue of Apple 2000 magazine.

The package received consisted of a ring binder with a 100 page manual and the software on 3.5" and 5.25" diskettes. Like all Micol Systems software the diskettes are normally formatted and you are advised to make working copies before you do anything else. The system software is ProDOS 16 v1.2 based and will, therefore, only run on an Apple IIGS . Here is the directory of the 3.5" diskette :-

Note that these files are stored on both sides of the 5.25" diskette which is a little cramped for space. I wondered why this diskette was included since I believed that all Apple IIGS computers arrive with at least one 3.5" drive? It seems that in the US of A they can get Apple //e upgrades and some, possibly with lack of foresight, may not purchase a 3.5" drive!

When you boot up your copy of the system master diskette you eventually find yourself in the MONITOR/SHELL.

ProDOS 16 is very slow and this operation takes some 52 seconds. I use Diversi-CACHE which speeds up the boot process and only takes 18 seconds. The MONITOR/SHELL allows you to enter various commands such as Help. The help screen is shown below.

Some nice features such as COPY and FORMAT are available. Note also BATCH which is somewhat like EXEC in Applesoft Basic but more powerful.

The Editor is invoked by the EDIT command. If you don't enter a file name either the current file is used or a screen onto an empty file is presented. The editor is a full-screen editor with the usual commands for moving, copying and entering text. Pressing the Option key plus another, for instance Option ? provides a help screen.

Everything is resident in memory so switching between Editor and Assembler takes less than a couple of seconds!

The manual clearly describes the operations of the MONITOR/SHELL, the EDITOR and the ASSEMBLER and there are some programming examples. However, the manual does not attempt to teach the user how to program the 65816 microprocessor nor, indeed, how to program the Apple IIGS . Like most assembler manuals you are referred to read books which teach one how to program the 65816. The manual also contains a listing of a medium sized Apple IIGS program which will aid readers to program the machine.

The 65816 microprocessor is more difficult to program than the 6502 series due to increased number of OP codes and addressing modes. This is compounded by the Apple IIGS which has hundreds of tool calls to enable the features of the computer to be used to the full.

First impressions of the Micol

```
MONITOR/SHELL LIST OF COMMANDS:

ASSM <PATHNAME>                          =    ASSEMBLE FILE
BATCH <PATHNAME>                         =    PERFORM BATCH PROCESS
BLOAD <PATHNAME>                         =    LOAD AN "MCL" FILE
BRUN <PATHNAME>                          =    RUN AN "MCL" FILE
CATALOG (OR CAT) <DIRECTORY NAME>        =    LIST SPECIFIED DIRECTORY
COPY <PATHNAME>                          =    COPY FILE ONE AS FILE TWO
CREATE <PATHNAME>                        =    CREATE A DIRECTORY FILE
DELETE <PATHNAME>                        =    DELETE A FILE FROM DISK
EDIT <PATHNAME>                          =    EDIT SPECIFIED FILE
FORMAT <PATHNAME>                        =    FORMAT VOLUME
HOME                                     =    CLEAR THE SCREEN
LIST <PATHNAME>                          =    DISPLAY TEXT FILE TO SCREEN
LOCK <PATHNAME>                          =    LOCK SPECIFIED FILE
ONLINE                                   =    LIST ALL ONLINE VOLUMES
PREFIX <PATHNAME>                        =    SET OR SEE DEFAULT PREFIX
QUIT                                     =    DO A PRODOS QUIT
RENAME <PATHNAME1> TO <PATHNAME2>        =    RENAME A PATHNAME
UNLOCK <PATHNAME>                        =    UNLOCK SPECIFIED FILE
```

The HELP screen.

```
NAME TYPE BLKS MODIFIED TIME

MICOL.MACRO

*PRODOS          SYS   42    18-MAY-87 14:43
*SYSTEM          DIR   1     11-SEP-87 16:11
*SYSTEM.LOADER   SYS   8     04-SEP-87 20:12
*MASTER.FILE     MCL   122   17-SEP-87  9:07
*SYSTEM.FILE     LWD   9     16-AUG-87 17:27
*INFO.DOC        TXT   9     10-SEP-87 11:28

BLOCKS USED: 616  BLOCKS FREE: 984
```

The Directory Screen

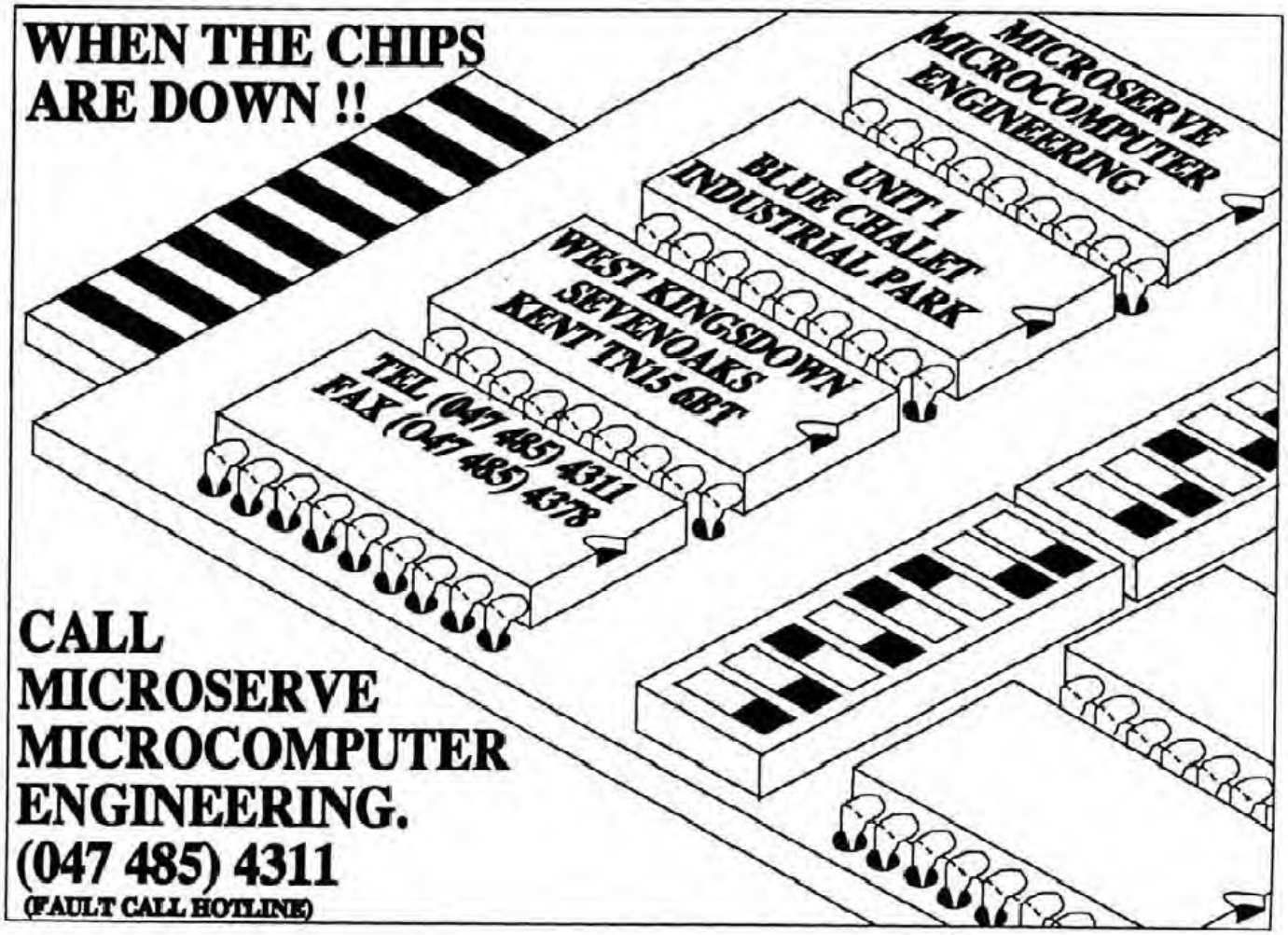
```
  START OF PROGRAM    (C) 1987 CORPWELL DATA SYSTEMS CANADA
----+---1---+---2---+---3---+---4---+---5---+---6---+---7---+---8
'ov"Oct Identical to the GS Option Key          - HELP -

 - (Z) Display Real End of File
 - (?) This Help Screen
 - (|) Page Scroll Up
 - (|) Page Scroll Down
 - (TAB) Set Tabulations
 - (1) Move to Start of File (Home)
 - (9) Move to End of File
 - (I)nsert File
 - (L)oad Text File (Compressed Format)
 - (M)ove Block
 - (N)ew / Clear Buffer
 - (P)rint Line Range
 - (Q)uit to Shell
 - (R)eplace & Search
 - (S)ave Text File With Compression
 - (T) Save Text File (Non Compressed Format)
 - (W)indow Print (Print Screen)
 - (X) Load Text File (Non Compressed Format)
  LINE=>0001 COL=>01  100%                          21/10/87  9:58:52 PM
```

The EDITOR screen

Macro assembler are good and I look forward to carrying out a full review on the product. I would, however, like to see a few small extras such as a file of useful macros to make programming the Apple IIGS easier for the beginner. Also it would be nice to see a lot more programming examples, preferably as documented text files that the user may load and examine. It is my opinion that the best way of learning to program is to read as many programs written by others as possible.

The authors of Micol Macro, Stephen Brunier and Allan Corupe, have in the short space of 1 year managed to produce a fully working system, which is quite some feat!

Apple2000 will be stocking Micol Assembler soon. Dave Ward will be reviewing this super new product in depth early in the New Year.
If you are interested in it please let us know so that we can speed up deliveries from Canada. We would like to thank Micol for supplying the review copy and look forward to the next Micol product which is a GS BASIC.



Appleworks Answers

By Steve Morrisby of Bidmuthin Technologies

Q. When I print out address labels from the AppleWorks Database the first few labels print OK but then extra paper feeds through and the labels no longer print in the correct place.

A. The Page Length code in the database printer options is probably incorrect. Set the page length (PL) to the same length (in inches) as the label (top to top). So making 1 page equal to 1 label. e.g. for a 1.5" label, set the PL to 1.5" . So, if printing at 6 lines per inch, you will print 9 lines per page , i.e. 9 lines per label.

Set the labels layout to print 9 lines per llabel and make sure that the number of lines printed per label are kept the same. Also ensure that both top and bottom margins are set to zero.

The reason for this is that AppleWorks tells the printer to form feed at the end of the page, unless the end of the page has already been reached. By printing to the end of the page the form feed instruction is suppressed.

Q. What are the advantages of AppleWorks V2.0 against V1.3; and is it worth the £50 + VAT upgrade fee?

A. The main advantage of AppleWorks V2.0 is that it has been modified internally to use IIGS memory. V1.3 of AppleWorks will run on a IIGS, but will only use the first 128K of memory (giving a 55K desktop).

Version 2.0 will expand up to 8 megabytes on the IIGS and will run on Apple //e and //c.

The second advantage is that it has a mail merge feature built-in which elegantly merges database information into a word processor document.

The third plus is in the spreadsheet. This now has logical AND/OR functions and there is now a ROUND function so that numbers are rounded to the required number of decimal places (or noughts) and calculations are performed on the numbers as displayed and rounded.

There are some other minor changes but the other main differences are in the size limits of AppleWorks itself. In these days of expanded AppleWorks the size limits are not as important as they used to be; but to refresh your memory:

AppleWorks desktop sizes are generally limited by memory. A 128K machine gives a 55K desktop for V1.3 and 56K for V2.0. Expansions are available for all the Apple II series and for all versions the maximum desktop sizes are (approx) 750K on a IIc. About 1 Meg on a II+. Upto 2.5 Meg on a IIe and 6 Meg on a IIGS. (All these, except the IIc, can be further increased but not cost-effectively).

AppleWorks is also limited to the number of lines and records it can hold in the word processor, database and clipboard. The base levels for V1.3 is 1350 records and 2250 lines, (This can be expanded to about 15,000 for both). Version 2.0 however has limits of 7250 lines and 6350 records which can be expanded to 23,000 lines/records. The clipboard has a base capacity of 250 lines/records but this can be increased to 2042 lines/records.

In summary: If you have, or are planning to get a IIGS, then get AppleWorks V2.0.

Q. I read an article in an Apple Magazine (not Apple 2000) which described how to print AppleWorks in colour on an ImageWriter II. The method described seemed very clumsy . Is there a better way.?

Q. Can you embed printer codes into the AppleWorks Word Processor?

A. Yes, I read that article too. The elegant way to print colour is to use embedded printer codes. Here's how:

You need to redefine the ImageWriter II as a custom printer. Of all the printer commands, only 4 can be changed within a line of text. These four are start and stop: boldface, underline, superscript and subscript.

Use one of these, e.g. boldface, to control the colour print. Set the control codes for the printer functions as stated in the manual. For the boldface, start and stop commands, we turn to the colour printing codes...

black	Escape K 0
yellow	Escape K 1
red	Escape K 2
blue	Escape K 3
orange	Escape K 4
green	Escape K 5
purple	Escape K 6

Set the printer codes for *boldface end* to **Escape K0.** This resets the printer to printing in black when the *boldface end* command is encountered. Now set *boldface begin* to **Escape K**. This, you will notice, is only part of the printer code....

Now, when *boldface begin* is encountered in a document the control code **Escape K** will be transmitted to the printer. The character immediately after the *boldface begin* command must be a number between 0 and 6. This number will not print but will be interpreted by the printer as completing the colour selection code. Thus^2HELLO^ will print HELLO in red (the carats(^^) represent begin and end boldface) and the on-screen formatting is only one character out. The only disadvantage is that you lose the boldface command, so use any of the 4 (bold, underline, sub and superscript) which you don't mind losing.

◆◆◆◆◆◆◆◆◆◆◆◆◆◆◆

If you have any AppleWorks questions then send them to **AppleWorks Answers** here at Apple2000.

◆◆◆◆◆◆◆◆◆◆◆◆◆◆◆

TIPS & TECHNIQUES

Two-colour PrintShop forms

We print our Quick Notes with Print Shop. The basic ideas is to print one run of letterheads and then run them through AGAIN, or starting halfway down the sheet. Obviously, if you use a different colour ribbon on the second print run, you get a two colour form on a standard printer. You dont have to, but we use NCR Carbonless paper which means we get an instant copy of what we have said to anyone at much less than the cost of a photocopy. When you have done both print runs, it is dead easy to guillotine them or just use a sharp craft knife right through the middle. A further tip if you do use NCR - do not remove the pinfeed perfs until you have written on them. Obviously, if you are going to use your printer to write on them, you must leave them on (and set your page length to 5 1/2" and set your top and bottom margins accordingly). (Print Shop is available for Apple II, IIec, Macintosh, and a special version for the IIGS will be coming out soon).

Apple Programmers Workshop?

Many people will have heard of this famous "APW" for the Apple IIGS. How many actually know what it is/does? I'll bet not many, anyway, as the TML Pascal (Release 1) we sell requires APW, and people kept asking me about it, I thought I would find out. A call to Mike Jones at Apple (UK) put me onto Gordon Simpson at the "Apple Developers Group".

He basically told me that APW comprises a Shell Environment/an Editor/ a Linker/a Debugger/ and some utilities (for £50.00 + VAT) and that the APW Assembler costs an extra £15.00 + VAT. Also, you have to become a member of the ADG (no restrictions on membership) and to join costs you £21.00 plus VAT. Anyway NO-ONE can send you any details on APW - so how can you really tell if its what you want? (Terrible that - isn't it?) Anyway MGA to the rescue - send us an SAE and we will send you a copy of the latest info on APW Version 1.0.B4.

Replies please to:
Jon Gurr at MGA Microsystems

Smart-run an Exec File with ProDOS

Many old DOS hands find ProDos rather complex even cumbersome until they manage to make the transition from DOS thinking. One of the features offered by ProDos which really does simplify a familiar operation is its ability to performa a smart-RUN on any file named STARTUP whenever a disk is booted. Saving a binary file as STARTUP will cause a BRUN STARTUP to be executed automatically and a TEXT file named STARTUP will cause an EXEC STARTUP to be done automatically. In DOS 3.3 a separate Applesoft program must be stored on the disk with a statement similar to: 10 ?CHR$(4); "EXEC FILENAME".

Thanks to Paul Lucas, WAP for passing on the tip.

BT

Christmas offers from Bidmuthin

		Was	Now
Pinpoint Toolkit including RunRun manager		£69	**£49**
RunRun		£49	**£29**
Ram Enhancement Kit		£29	**£15**
Quark Catalyst 3.5"		£79	**£29**
Quark Catalyst 5.25"		£79	**£29**
Point to Point comms.		£99	**£79**
Visualizer //gs		£89	**£79**
Visualizer //e,//c		£79	**£69**
VIP Professional //gs		£249	**£149**
VIP Prof.//e,//c (used)		£199	**£99**
One-To-One Subscription Pack		£50	**£10**
Infomerge		£29	**£10**
Graphicwriter //gs		£129	**£89**
//e, inc. duo-disk drive & monitor // (used)		-	**£500**
5.25" drives		£119	**£109**
Imagewriter 2 cut sheet feeder (used)		£195	**£125**
//c mouse		-	**£25**
Pace Nightingale modem		£85	**£65**
//e keypad		-	**£15**
//c system clock		£49	**£29**
Phasor Speech/Music Card		£179	**£99**
RGB option for RamWorks		£129	**£69**
Apple //gs RAM cards (Apple Brand)	256K	£95	**£50**
	512K	£150	**£80**
	1meg	£260	**£140**
800K 3.5" Mac ext.drive		£195	**£175**
Word Mac		£295	**£219**
Works Mac		£245	**£199**
Pagemaker 2 Mac		£450	**£375**
OMNIS 3 Plus Mac		-	**£299**
Copy II Mac		£49	**£29**

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Middlesex HA3 8BT
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New for the // range

A quick survey of some of the hardware and software products which have recently been released for the Apple)(, // and GS machines

Softwood GS File

a fast, easy to use database manager giving more features than AppleWorks and a Mac-like interface.
(m) GS

The Write Choice

an easy to use word-processing system which also includes a typing tutor and useful style manual.
(m) GS

Merlin 8/16

a macro assembler which produces both 8 and 16 bit code for the 6502, 65C02 and 65816.
(m) GS

Writer's Choice *elite*

a wordprocessor with Mac-like features, combining text with graphics and Clip Art.
(m) GS

Print Shop GS

the well-known program now brought to the GS, adding colour and many extra features, and works with **all** common printers.
(m) GS

The Prime Plotter

a comprehensive plotting package producing graphics on the screen, or to a printer or pen plotter.
(m) //e //c GS

TopDraw

an 'object-oriented' graphics drawing package with many superb tool and colour options.
(m)
GS

8/16 Paint

a paint program working in all graphic modes from hi-res to super hi-res.
(m) GS

Datalink modem

a 1200/1200 Hayes compatible internal modem from AE, with auto dial/answer and own software package.
(b) //e //c GS

3.5" disk drive

800k 'Chinon' type drives are available for Apple //'s with interface card
(b) //e //c GS

Serial Pro

a multifunction card combining a ProDOS compatible clock with a Super serial interface which is software controlled.
(b) //e //c GS

Pinpoint GS starter pack

the most popular pop-up programs for AppleWorks - spell checker, keyboard macros, ramfile loader and accessories.
(b) GS

Manz Aztec C

the ultimate in software development systems for the Apple // range -

Apprentice C for the beginner
Aztec C65-c writes ProDOS or DOS 3.3 programs
Aztec C65-d writes DOS 3.3 programs
Cross Development System produces MS-DOS, Mac and // programs.
(m) //e //c GS

Timeout series

from Beagle Bros come 7 brand new enhancements for AppleWorks

Graph - plots 9 types of graph from spreadsheet data
Superfonts - print AppleWorks reports with Mac-like fonts and styles
Quickspell - spelling checker from inside AppleWorks
Ultramacros - macro and command builder
Sidespread - prints sideways with many fonts and sizes
Filemaster - complete file handling from within AppleWorks
Desktools - 12 desk accessories available from AppleWorks

//e //c GS

SSI Classics

some of the best in computer gaming have been re-released and are great value-
Gemstone Warrior
Germany 1985
Fortress
RDF 1985
Wings of War
Computer Baseball
Ringside Seat
Reforger '88
(m) //e //c GS

These products are available from suppliers who advertise in this magazine:

(m) MGA Microsystems

(b) Bidmuthin Technologies

Software Library Review

CELLA

Andrew Menadue has written this variation on the 'Life' program.

CELLA was written on an Apple][+ using the Merlin Macro assembler. Versions of the program have been run on an Apple IIe without modification. Both machines used a monochrome monitor and the program does not use colour. CELLA assumes Applesoft Basic is in ROM when it exits.

CELLA: A CELLULAR AUTOMATA GENERATOR

This program draws patterns based on cellular automata. Cellular automata are very simple machines. The one used in this program is based on a Scientific American 'computer recreations' article published some time ago. (Unfortunately I no longer have the issue of the magazine so cannot give further information for anyone who is interested).

The automata used is a one-dimensional string of 'cells' that can be either 'alive' or 'dead'. This is similar to the well-known game of 'life', the major difference being that life is two dimensional.

To determine whether or not a cell should be alive or dead, simple rules are employed, again very similar to life. The rules are applied to a string of cells and from this string, the next generation is derived.

When CELLA runs successive generations of cells are displayed down the hires screen. The rule used in calculating whether a particular cell is alive or dead involves calculating the total number of living cells in the five spaces above the cell. This total is then compared with a set of 'key' values. If the total matches one of the key values then the cell in question is alive, if not then it is dead in the next generation.

Using this rule the entire history of a string of cells is displayed down the screen. The pattern generated depends only on the first generation of cells.

The patterns generated by this rule depend to a large extent on the key values chosen. Using various combinations of key values gives many different types of pattern. The types of pattern fall into one of three general types:

I. A pattern that lasts only a few generations and then dies out.
II. The opposite - a pattern that never dies out.
III. The most interesting group of patterns, generating a fractal-like pattern.

The third group of patterns is most interesting, generating pictures that sometimes have a very organic feel to them (especially if they are viewed upside down). The organic feel is re-inforced by the frequently occurring sub-patterns that are found at the bottom (or top if viewing upside down) of the pattern. These look very much like mathematical fruit or flowers.

THE PROGRAM

The first generation string of cells is generated by a pseudo random routine at the top of the screen and the picture is plotted from top to bottom of the primary hires screen. The psuedo random routine used deserves a little explanation. The routine uses the Applesoft ROM for a source of random bytes of information which are then used directly as the first generation of cells. I used this method as a quick method of generating the random first generation and was going to replace it with a standard random number generator later. The currently used generator has a 'flaw' in that it sometimes generates a very repetitive non- random sequence of bytes due to the non-random nature of the Applesoft ROM. This turned out to be a feature not a flaw as it can be interesting to see the effect of a repetitive first generation, as well as a random one.

COMMANDS

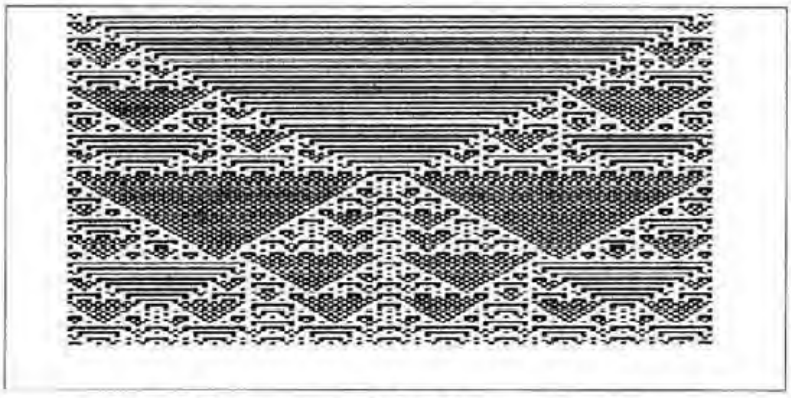
Several commands are available, and should be typed after the backslash prompt and be terminated by a return.

EXAMPLE SESSION

A sample series of commands:

BRUN CELLA	Run CELLA
?<RETURN>	Display command summary
<RETURN>	Re-display hires screen
C<RETURN>	Clear the screen
S<RETURN>	Generate random seed line
K<RETURN>	Examine the key values
K244<RETURN>	Set the key values to 2,4,4
G<RETURN>	Generate the pattern
K245<RETURN>	New keys of 2,4,5
G<RETURN>	Another pattern is generated but the seed line is the same as the last pattern

Finally, some interesting patterns: 2,4,4 generates an interesting organic pattern. 2,4,5 is similar but lasts longer. 2,3,4 lasts forever and has triangular sub-patterns.



One of the many varied Cella constructions

I would be interested to hear of improvements or changes to the program or of any other similar types of program.

CELLA is available on disk D111 from the Apple II Software Library.

Mac2000

New products for the Macintosh family

Micro Dynamics MARS™

Micro Dynamics Ltd. have introduced what they call 'the first cost-effective, advanced, Multi-user Archival and Retrieval System.' Micro Dynamics MARS is an integrated electronic document management system that provides permanent compact storage and on-line access to vital information. By incorporating state-of-the-art technology such as high speed scanners, optical disk drives, local area networks, laser printers, and the use of the Macintosh family of computers, MARS enables you to scan, archive, retrieve, view, print and electronically distribute digitized images of paper documents.

Using this system, it is hoped that a user will be able to scan vast quantities of paper documents and permanently archive them on compact WORM (write once, read many) optical disks. As an alternative to having warehouses full of paper files or microfilm, a business could use the comparatively cheap optical disk system with MARS.

Micro Dynamics state that quick and easy retrieval of archived documents is a central feature of their system. If the user is prepared to buy the most advanced optical disk drives, then literally millions of documents can be kept on-line. Special directory servers maintain indexing information and enable the speedy finding and retrieval of documents meeting the search criteria. When a document has been found, it may be viewed, or an application may be launched so that it may be edited. It may be printed on a laser printer or shared with others on a network. Anyone on the network can input or retrieve documents from their own Macintosh.

Three levels of security are built into the optional security module. These are:- user access control, document assignment and data encryption. A log-in system makes sure that only designated personnel have access to the system. Each document is filed in the system with information as to who may view it. Also documents are encrypted as they are sent over the network.

LCD Display Device

A new liquid crystal display plate and software that allows any standard overhead projector to project a Macintosh screen image has been marketed by Network Specialists, Inc.

The new device is called StretchProjector, and is designed for group viewing of Macintosh screens in presentations, meetings, seminars and conferences. The display device allows more people to view without having to crowd around a traditional Macintosh screen.

In addition to its uses as a formal presentation system, StretchProjector can be a powerful tool for working meetings, according to Peter Killcommons, the president and founder of Network Specialities. He points out that business planners can work together to dynamically change and rearrange spreadsheets, editors can lay out publications as a group, and engineers can study plans and drawings in team meetings with the aid of StretchProjector.

StretchProjector is a complete hardware and software system consisting of a screen interface card, proprietary LCD screen plate, cables and software. It gives an enlarged screen viewing area of 600 x 400 pixels, giving approximately 40% more data display than a standard Macintosh screen. Tiny surface-mounted chips are embedded in the LCD glass plate which fits over the projector screen. The chips are protected from dirt and dust and the plate is quite light and thin. It weighs less than one pound and may be carried in a briefcase or folder.

The LCD is composed of liquid crystals designed to avoid overheating when subjected to the heat generated by a typical overhead projector. The technology of the screen interface card allows the cards chips to be reprogrammed by the software provided by the manufacturer. Because of this, StretchProjector can accomodate an unlimited number of hardware upgrades. Also the 'supertwist' technology allows the display to be viewed clearly from very sharp angles.

The software also allows the display of two different images, one on the Mac Screen and one on the LCD. Two-screen software also provides the option of splitting the image horizontally between the two screens, so that images can be generated on the standard Mac screen, then 'dragged' onto the projected screen.

The StretchProjector works with Macs up to and including the SE.

QuickDEX™

Greene Inc. have announced the release of QuickDEX™ version 1.4, which is a free-form database Desk Accessory with an autodialler that lets you open up as many as eight card decks in memory at the same time. QuickDEX has a quick-find feature that can find any word, phrase, number or sentence instantly.

This latest version of QuickDEX is supposed to be faster than previous versions. As well as fixing some Mac II bugs, some features have been added. The ability to dial the phone using the Mac speaker has been added. A conversion utility that will convert SideKick phone books to QuickDEX files has been added, together with more prefix dialling options for the autodialler.

MIDIMAC™

MIDIMAC™ Sequencer v 2.5 from Opcode Systems reviewed by Jeremy Arnold

The **MIDIMAC™ Sequencer** is described as 'a powerful real-time performance and composition system for the Apple Macintosh'. Basically it enables you to record MIDI information on up to 32 tracks, as you would record music on a 32 track tape recorder. The obvious advantage of using the Midi-Mac Sequencer is that it is much more flexible than a tape recorder.

The main features of the MIDIMAC Sequencer include the following:-

-Up to 26 sequences (each of which could have up to 25 subsequences) available to be played from the Mac keyboard.

-Up to 16 sequences can be played at one time.

-Sequences may be 'chained' together, as subsequences, to form a new sequence (or as the Americans would have us say, a song.)

-Full MIDI channel assignment features.

Startup

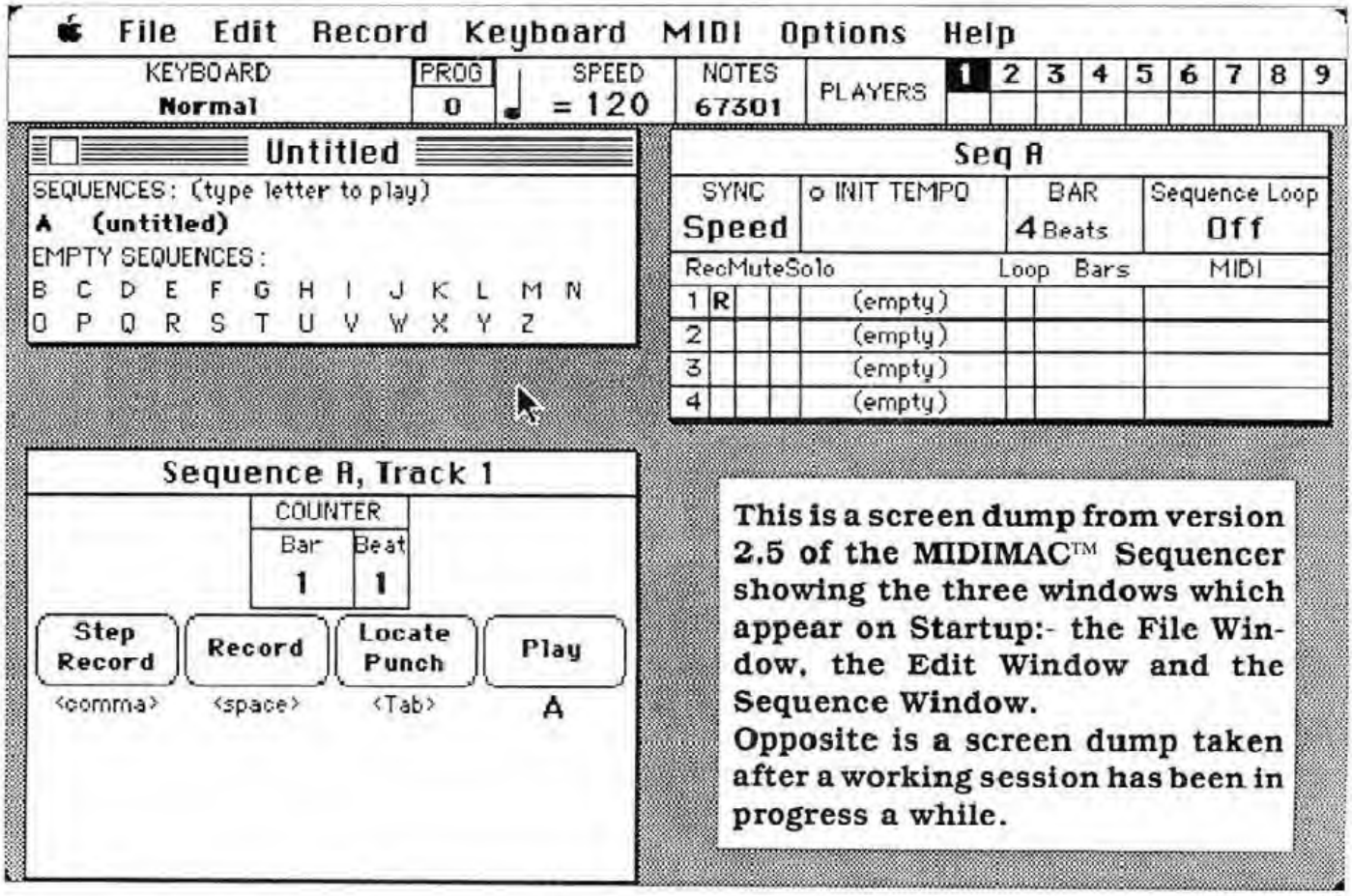
The use of the MIDIMAC Sequencer does require the user to have some familiarity with basic Macintosh techniques such as mouse control, windows, pull-down menus etc, and the manual does suggest to the uninitiated that they may gain this familiarity by starting with trusty programs like MacPaint and MacWrite. For old hands at using the Mac, the MIDIMAC Sequencer is instantly usable, with no surprises as far as layout and management are concerned. Providing that your MIDI equipment has been correctly linked to one of Opcode's interfaces (in my case, I was loaned a Professional Plus for the purposes of this review), you can be recording and playing back within a few minutes of switching on. The sequencer allows you to define a 'MIDI setup', to which the system will default on starting up the Macintosh.

Layout

Once into the program, you are presented with three main windows:- the File Window, the Sequence Window and the Edit Window.

The File Window :- This shows which of the 26 available sequences have been used. Each is assigned to a letter of the alphabet and can be played by pressing the corresponding letter key on the keyboard.

The Sequence Window:- A Sequence Window can be opened for any sequence by double-clicking on it



This is a screen dump from version 2.5 of the MIDIMAC™ Sequencer showing the three windows which appear on Startup:- the File Window, the Edit Window and the Sequence Window.
Opposite is a screen dump taken after a working session has been in progress a while.

in the File Window. The Sequence Window displays information on the 16 available tracks, each of which may be individually named. The information includes the number of bars recorded on each track, quantization information, looping information and the number of bars recorded on each track. Up to four Sequence Windows can be open at the same time.

The Edit Window:- This window contains 'buttons' similar to those on a tape recorder. Initially, these allow for either step-time or real-time (which can be 'free' or quantized to any degree) recording, 'punch-in' editing or playing of the sequence. If 'Locate Punch' is chosen a new window is opened. This displays a location counter, 'punch-in' and 'punch-out' points (all in bars, beats and units) and rewind, play, fast-forward and record 'buttons'. The number of units per beat is also displayed and can be changed in this window.

The Status Bar, across the top of the screen (underneath the pull-down menus) displays the current keyboard mode, the internal clock speed, the number of notes, or 'events', available for recording and the play/record status. It also shows which sequences are currently playing.

In Use

The first time that I used the system, I dived straight in at the deep end, without so much as a glance at the manual, (except for set-up details, that is), and to my surprise, managed to tread-water safely for some time. Within minutes I had recorded a simple tune and had it playing back to me. After adding a few embellishments and experimenting with different functions of the sequencer however, its true potential began to show itself and I became intrigued with the possibilities of the system. The usual 'can it do this?' questions were quickly answered by reference to the manual, which I found to be very clear and precise.

Recording a Sequence

Having first chosen an empty sequence by double-clicking on the corresponding letter in the File Window, a Sequence Window is opened and the first track becomes available for recording. Before starting to record, however, there are several functions which need to be considered, such as the speed of the clock, the number of beats per bar, the note value of the clock's beat, quantization details and MIDI channel selection.

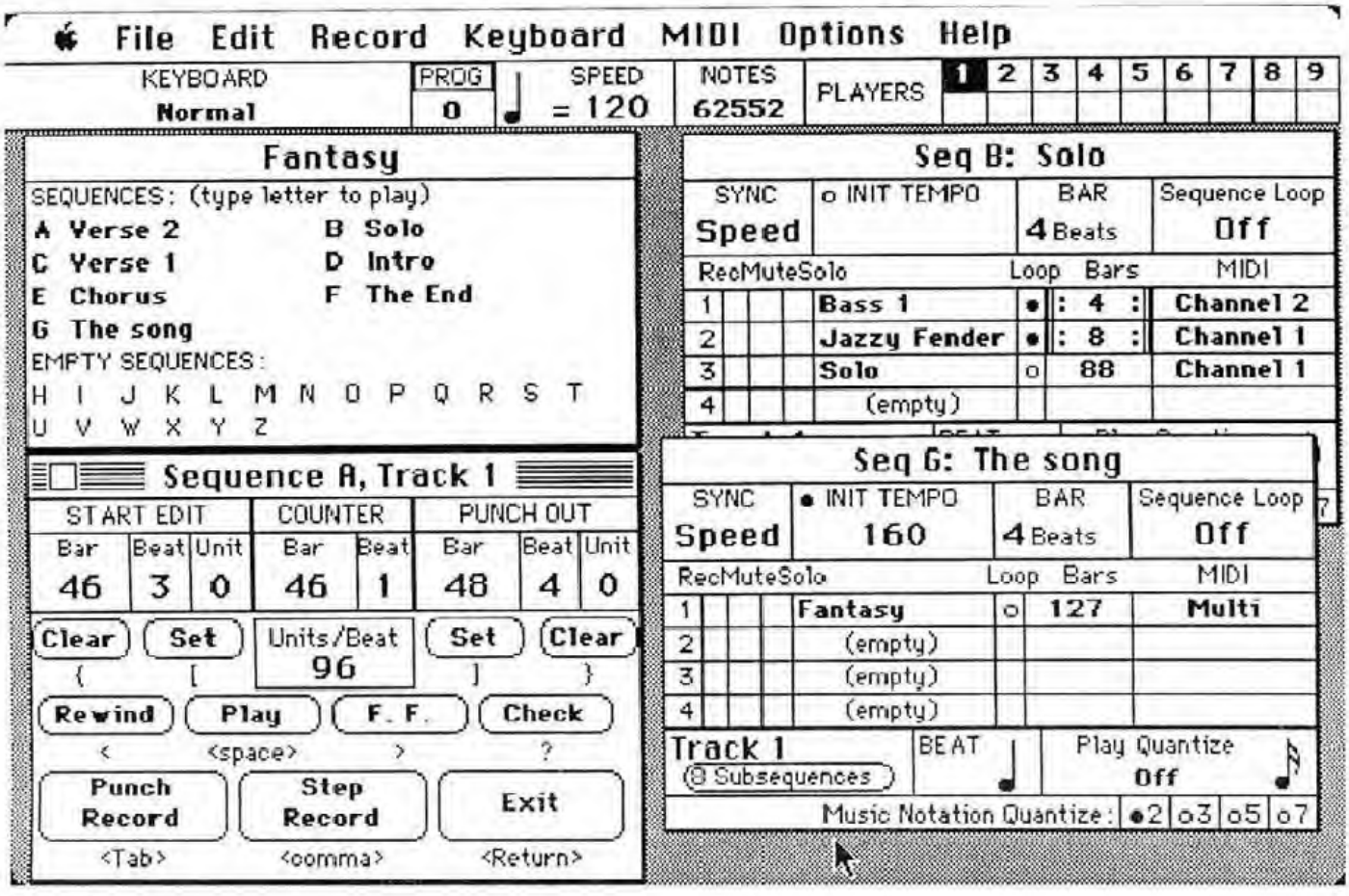
These functions or 'fields' as the manual calls them, can all be changed within the Sequence Window. Once these fields are set, recording can be started by clicking on the 'Record' button in the Edit Window. When this is done the internal clock sounds a metronome click through the Mac's internal speaker. Actual recording does not begin until either a note is played or the 'Begin Timing' button is 'pressed', a handy feature which leaves the player's hands free to prepare for the performance.

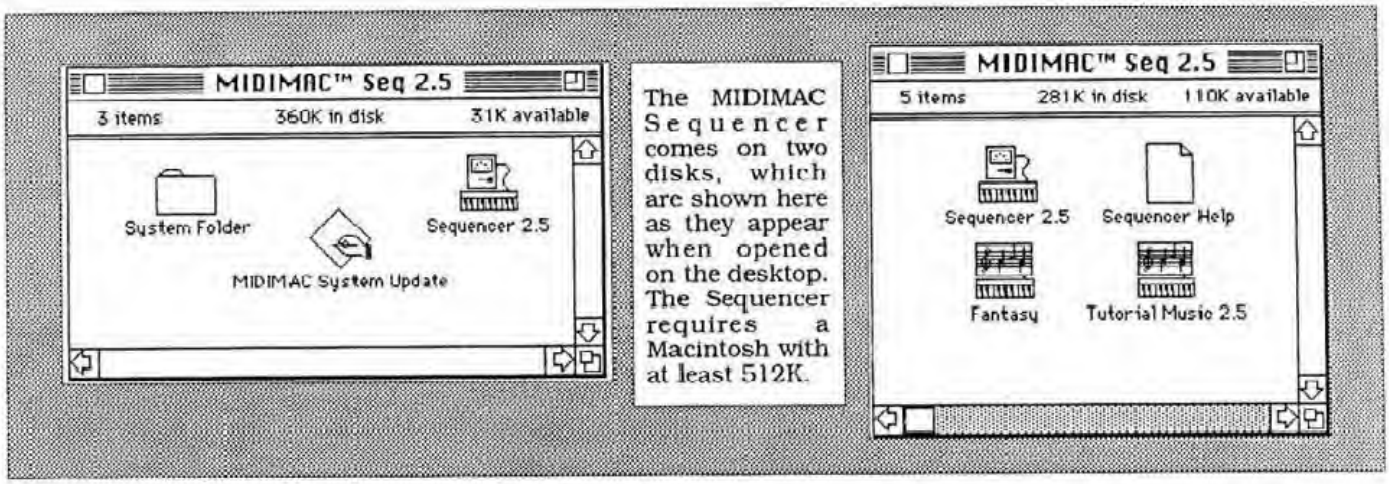
Another very useful feature is that when you begin recording any other previously recorded tracks in the sequence will start playing. Clicking on the 'Stop' button stops the recording and information regarding the number of bars and MIDI assignment is instantly displayed in the Sequence Window, against the appropriate track number. The number of bars can be trimmed down easily which is a welcome feature, since it is easy to over-run when recording. Also track looping, the repeat of an individual track's music, can be set. This ability to loop single tracks within a sequence is useful, and often saves a lot of repetitive recording under a longer non-repetitive track.

Recording of new tracks is achieved simply by selecting record on the required track in the Sequence Window, and altering desired fields as before. Another good feature is the ability to change the quantize settings on each track. Up to 16 tracks can be recorded in each sequence. Step record allows you to enter a track note by note, selecting the value and pitch of each event in turn, handy for entry from a musical score.

Generated Sequences

Should you wish, the sequencer will record a set of notes or chords and generate a new sequence from them. Once recorded, the notes may be played forwards, backwards, alter-





The MIDIMAC Sequencer comes on two disks, which are shown here as they appear when opened on the desktop. The Sequencer requires a Macintosh with at least 512K.

nate (forwards then backwards), or randomly. The rhythm and duration of notes can also be altered to produce different effects.

Editing a Sequence

In the event that you listen to a sequence after recording only to find a glaring error in the midst of it, the Edit Window will save you from having to start again. If you select 'Locate Punch', the Edit Window takes on a new guise as a very precise 'drop in' recorder.

Simply play through the sequence until you have located your error, decide on the best 'drop in' and 'drop out' points (to the nearest 1/96th of a beat), set these in the appropriate 'fields' and select Punch record. You are then able to either start playing which will drop you in at the set location and record until the drop out point, or select 'start' which will play through the track recording only when you begin playing.

The Editor is a very useful tool, the 'tape-machine'-type buttons being very easy to understand and operate. Anyone with experience of a 4-track tape machine will find the Editor instantly usable.

Playing a Sequence

Single sequences can be played by typing the relevant letter on the Macintosh keyboard. Triggering playback of a new sequence in this manner while a previous one is still running cuts the original one short. However, if the 'Players' option is selected from one of the pull-down menus, up to nine sequences can be played simultaneously simply by allocating a letter to each of the nine 'players'.

I was surprised at one point to find that I could have nine sequences randomising at once! If selected in record mode, the 'Players' option allows for sequences to be merged into a new sequence. Hence many sequences can eventually be played at one time although the manual encourages the playing of not more than 16 simultaneously.

Building Sequences Into a Song

Sequences can be 'chained' together into a 'song' by using 'Locate punch' in the Edit Window. Once the position of each sequence start has been set on the location counter, pressing the relevant key will record in the correct position a copy of the sequence into the new sequence, or song, as a 'subsequence'. The new sequence can then play through the whole song at the touch of one key. Alternatively, sequences may be triggered using the aforementioned 'Players' option to record a song in real time.

Other features

Additional features include merging and unmerging tracks, transposing tracks or sequences, various sync modes (using internal or external clock sources), MIDI assignment and setup modes and of course, the saving of sequences, files and setups.

Conclusions

I was very impressed with the sequencer as a whole, but especially with the design and layout of the system, which have been thoughtfully engineered to make the musician feel at ease. Use of familiar controls similar to those found on tape machines are an example, since few working musicians would have had no experience of such controls.

A computer based system holds many advantages over a standard tape machine, an obvious one being the ability to 'undo' your last action. Accidentally erasing a virtuoso solo on a tape machine cannot be 'undone' (more's the pity!) at the flick of a mouse. Also you would be hard pressed to find a tape machine with such accurate editing facilities as are found in this system.

After some use of the system I do have a few complaints. I found that the system crashed if one attempted to play a sequence with the interface inadvertently switched off. No mention is made of this in the manual, and maybe some warning should be given since losing work and having to start again is just slightly annoying. Also when I (thoughtlessly perhaps) tried to copy a randomised sequence, after several minutes I was told there was insufficient memory available and the system crashed. Some safeguard against this would be helpful. Lastly, I was unable to record a Mono/Poly mode switch on my keyboard as part of a track. Again, slightly annoying but such complaints pale into insignificance when compared with the wealth of 'plus' points.

I would recommend this system to any musician who wants a computer-based sequencer. For Macintosh owners with musical leanings, and of course, access to suitable MIDI equipment, I would definitely suggest giving this system a look-over. As for the professional musician or recording studio with MIDI equipment, the Opcode MIDIMAC Sequencer must figure high on any check list of possible purchases, especially for those owning a Macintosh already.

Professional Plus - no problems.

Please note that the MIDIMAC™ Sequencer needs a Macintosh with at least 512K of RAM.
The MIDI Interface is sold separately from the software.

info

Product: MIDIMAC™ Sequencer v 2.5
Publisher: Opcode Systems
Available from:
Argent's,
20 Denmark Street
London WC2H 8NA
Price: £249.00
Product: Professional Plus MIDI Interface: *Price*: £185.00
Value:
Performance:
Documentation:

Background

HyperCard
News
Reviews
Help
Tips
Stackware

We are grateful to Apple for allowing use of Windoid material in this section.

Welcome

This is the first issue of Background which contains amongst other items extracts from The HyperCard Windoid - the newsletter for Apple's HyperCard User's Group. We hope that Background will create a forum for information about HyperCard, including tips and techniques in various accessible formats to make your use of HyperCard even more valuable, flexible, and fun.

We will bring you articles written by users and the development team and will make efforts to take your questions and problems directly to the source for an answer.

In addition, and most importantly, Background and Windoid will create an International forum for the open sharing of stackware and information.

Bill Atkinson and Dan Winkler have shown a remarkable ability to immediately understand the needs, ideas, and suggestions of HyperCard users. The members of the team have thus been able to assist greatly in shaping HyperCard into what it is today. The continuing interest in user input gives users a unique opportunity to help shape HyperCard's future.

We will provide an opportunity for our members to contribute to the continued genesis of HyperCard. With your assistance we can bring to HyperCard added depth and functionality. If you have a bug, suggestion, or comment send it to:

Background,
Apple2000
P.O.Box 3
Liverpool L21 8PY

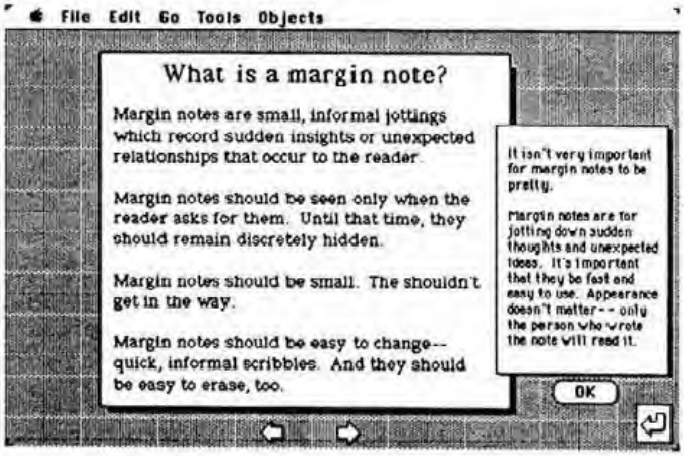
Please ensure that you put your machine type, memory used, and any relevant information so that we can get the correct answer.

New StackWare

1- Margin Notes - Disk 063

Margin Notes is a stack produced by Eastgate Systems which shows the principal of having small pop-up notes within HyperCard cards. Margin Notes are brief jottings, used by the HyperCard Author and Reader. Readers, by adding and revising margin notes, can record their own thoughts and ideas as they read the document.

•Margin Notes.
Public Domain
Eastgate Systems,
P.O.Box 1307,
Cambridge.
Mass 02238



2- Script Report - Disk 061

Script Report is a stack that will open any stack and read all the scripts in that stack. It reads all card, background, field and button scripts and then produces a report which enables the user to have a record of all scripts in the stack. A very useful utility that is shareware and costs $10.

•Script Report 1.1
Shareware $10
Eric Alderman
48 Shattuck Square suite,
13, Berkley. Calif 94704

New StackWare

3- Application Launcher

Application Launcher is developed by Paul Robichaux of Fairgate Technologies. It is a quick way to add the facility to launch applications from HyperCard. You can use it as a Finder because when you quite an application it will return you to HyperCard and the Application Launcher stack.
A very useful utility stack that can save you time in designing you own Application Launcher!

• Application Launcher
ShareWare
Fairgate Technologies
483 Little Road,
Marietta, GA 30067

4- MacTalk - Disk 062

MacTalk is a weekly computer-media event containing reviews, news and interviews from the Macintosh Scene. It used the MicroFilm Reader to display the pages but now they have changed to HyperCard and what a fantastic piece of work it is. It uses HyperCard in such a neat way that you do not realise that it is in the HyperCard media.
It contains a complete index and has many interesting stories.
This is a highly adictive stack and i a good leasson in HyperCard programming.
MacTalk is a Shareware product and costs just $5 per issue.

• MacTalk
ShareWare $5
1601 Weatherstone Drive
Blue Springs
MD 64015

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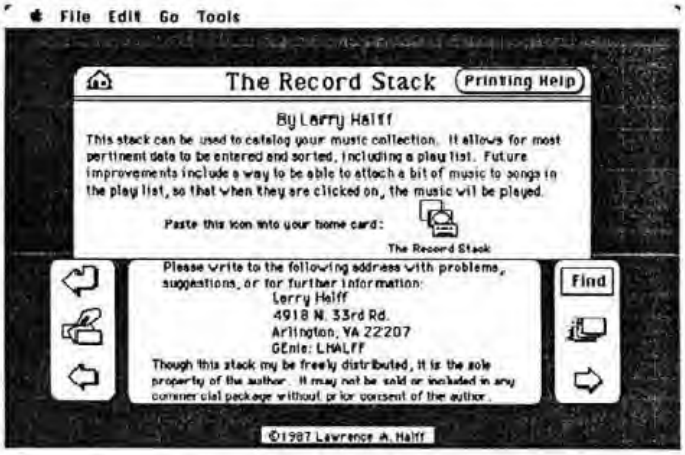
5- The Record Stack - Disk 061

Larry Halff has made a good job of this stack to keep a record/tape library.
It gives you a very neat database facility and gives an idea of what sort of thing HyperCard can do and look like.
This is the first of many specialised HyperCard Stacks. You can expect to see the experts in various fields doing their homework on HyperCard.

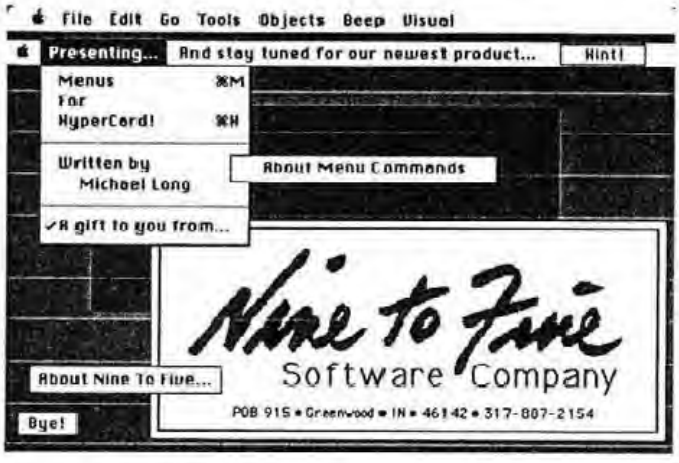
•The Record Stack
FreeWare!
Larry Halff
4918N 33rd Rd,
Arlington. VA 22207



6- Menus for HyperCard - Disk 064

Menus for HyperCard is a super give-a-way stack from the Nine to Five Company.
It demonstrates and explains how you can add menus to your HyperCard stacks.
It may seem too advanced for many users but it will allow that little extra to be achieved by those that do not want their stack to look standard!
Full explainations are given and an advert for the next stack from this innovative company make up a nice little package.

• Menus
FreeWare
Nine to Five Co.
P.O.Box 915
Greenwood. IN 46142



Made in Britain StackWare
Members are invited to send stacks for inclusion in a British StackWare Disk.

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Power User Tips

• Create a button on your Home card with a script that says "go to stack "the stack you want"." When you click on it, not finding a stack by that name it will put up SFGetfile asking "Where is the stack you want?"

• To zoom directly to the script of an object, hold down the Shift key while double clicking, or going to its "info" window.

• Do not name a button or a field with a numeric character. This is because if you ask for a button "1812" HyperCard looks for the button whose number is 1812.

• In the button or field tools, holding the shift key down when dragging either will give you an automatic straight edge. You can easily drag buttons or fields in a straight line, either horizontally or vertically.

• Option-Drag in Fatbits allows you to grab and move the screen.

• To "pre warm" the cards in a stack so that "show all cards" will really cook through the stack, put an on openstack script that locks the screen, shows all cards, and then unlocks the screen. This quickly and invisibly cashes all the cards, and show card scripts will work at optimum speed.

• If you are running on a MacII and want to see Visual Effects, be sure to set the monitor to 2 bit mode.

HyperTalk Answers

1- Sticky Button Technique

Question: How can get a word in a field to do something when I click on it?

Answer: One way would be to put a transparent button over the text. If you want to be able to move the word around inside the field without having to move the transparent button with it, you can use the following "sticky button" technique.

The following script gets put into the field:

Note: Mousedown, mousestilldown, and mouseup messages only get sent to a field when that field is locked. It is therefore necessary to lock a field when expecting that field to deal with any of these messages.

The idea behind sticky buttons is to cause a word to be selected (highlighted) with a single mouse click. The selection' then becomes a container.

```
On Mousedown
   Set locktext of me to false
   click at the clickloc
   click at the clickloc
   if the selection is "Apple" then answer "What kind of
   Apple:" with "Mac" or " II"
     else
   put "I don't know that word" into msg
   end if
   set locktext of me to true
End Mousedown
```

2- Double-click a button!

Question:
How can I create a script that will enable me to double-click an icon button?

Answer: Consider creating a button script like the following.

The following handler for a button that will detect a double-click on itself. It waits 30 ticks for the 2nd click then times out. Put this handler into a button's script, then add whatever special things you want your button to do when double-clicked. Adjust the timeout value if you want it to wait longer (or shorter). A tick is 1/60th of a second.

```
on mouseUp
 put the ticks into originalTicks
 repeat until the mouseClick
  if the ticks - originalTicks > 30 then exit mouseUp
 end repeat
 -- Put next whatever you want the button to do
 -- when double-clicked.
 -- For example:
 Play "Boing"
end mouseUp
```

3- Clicking on a field line

Question: How can I find out which line of a field a user has clicked in?

Answer: Using information that can be obtained about a given field, it is easy to calculate.

First of all, we can find out what size rectangle a field occupies by using field property, RECT. Short for rectangle, RECT returns four numbers in a comma separated list. The numbers represent the upper-left and lower-right screen coordinates for that field.

Next, we can find out what the line height of each line of a field is by using the field property, TEXTHEIGHT. As you might have guessed, each line of field can really be expressed as a multiple of the line height. Unfortunately, we must determine that multiple using the screen coordinates. Here's a user defined function that will do just that:

Ignore the openfield handler for now, but take a look at the function. As you may remember, the Hypercard function, THE TARGET, returns the name and id of the object which last received a message. Likewise, the Hypercard function THE CLICKLOC returns the horizontal and vertical screen position of the last mouse click as two comma separated integers. With that knowledge, let's dissect the function Clickline() (yes you need the parentheses).

The function returns an integer which represents the number of the line of a field clicked in.

Here's how the function determines the field's line number. First, it takes vertical location clicked at by the user (item 2 of the clickloc) and subtracts the top of the field (item 2 of the rect) to determine how many pixels are between the top of the field and the location clicked

```
Function Clickline
    return (trunc(((scroll of the target) ¬
    + (item two of the clickloc) ¬
    - (item two of the rect of the target)) ¬
    div the textheight of the target) + one)
End Clickline

On Openfield
    put clickline() into msg
  pass openfield
End Openfield
```

Background compiled by Jim Panks

3- Clicking on a field line *(continued)*

at. Once this is known, determining the line number is a matter of dividing those pixels by the TEXTHEIGHT. This is what the rest of the function does. We add 1 because Clickline() returns a zero for line 1.

Clickline() is very flexible. In the openfield handler shown above for example, we use clickline() with a put statement, treating it just like the number it returns. You can also use it with an IF

THEN statement or any place where you would use the number itself. All you need do is replace the 'put line' of the openfield handler with your script.

4- Clicking on a scrolling field line

An interesting exception arises when using scrolling fields. The function above *(3- Clicking on a field line)* does not account for lines that may have scrolled off of the screen. It looks only at the visible area of the field. Consider the following function:

by, it is necessary to truncate the value using the TRUNC function.

Put both the function definition and the openfield handler in your home script where they can be used by any field in any stack.

```
Function Clickline
  return (((item 2 of the clickloc - item 2 of the rect of the
  target) div the textheight of the target) + 1 + trunc(scroll of
  the target/textheight of the target))
End Clickline
```

It adds the number of lines that have scrolled off the screen to the total number of visible lines. The field property SCROLL returns the number of pixels scrolled off the top of the field. When divided by the TEXTHEIGHT, this yields the number of lines. Since a full line may not have scrolled

One final note: a "line" to HyperCard is a string of text separated by a carriage return. Therefore "the number of lines in field "myfield" " will return the number of carriage returns in the field, regardless of how the text may have wrapped in the field.

Stack Design Issues

1- Go Back

Beware of relying on "Go Back" buttons for navigation in your stack. Push and Pop are where it's at. If the user strays just a little from the "predicted" course of navigation, the Back buttons just take him/her on a confusing little trip down memory lane. A good technique: On opencard "push recent card", which pushes where you just came from. Then when you do a "pop card" you will always go to that recent location.

If you suspect that your pushes and pops are not in sinc, (happens before harminica convergences) add the following scripts to that stack script to help you sort out your pops.:

```
on pop params
  put the params after msg
  pass pop
end pop

on push params
  put the params after msg
  pass push
end push
```

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News

1- HyperCard now available at Dealers

Apple U.K. have despatched supplies of HyperCard to all U.K. Apple Dealers and it should be available now.
The price is as reported £35.00 plus VAT. At this price it is a bargain. The software comes with a very comprehensive manual of over 200 pages and is up to the usual Apple standard. HyperCard arrives on four 800k disks and includes a stack from Apple2000 called 'Hot Mac Tips'.
All new Macintosh machines will come with HyperCard as part of the System Software supplied.

2- HyperCard Reference Book.

The Danny Goodman Book on HyperCard, 'The Complete HyperCard Handbook' [ISBN 0-553-34391-2] published by Bantum is now available in the U.K. from MacLine and Computers Unlimited.
It is priced at around £29.00 and although expensive is a good introduction and reference to HyperTalk the programming environment.
With 724 pages is will make excellent night time reading!
The Apple Developers Group [ADG] should have the HyperTalk Reference Manual available shortly although no price or date has been announced .

3- Apple2000 HyperCard StackWare .

The Apple2000 HyperCard Stackware is growing rapidly from just three disks a couple of weeks ago to thirteen now.
StackWare is the ideal way to learn to use HyperTalk and it will give you some really good ideas on design of your own stacks. Many of the stacks are exceptional and are of commercial quality and ready to use or modify.
The StackWare we have, has come mainly from the U.S, certain stacks were produced in this country but at present they are a minority. We would like to produce a British Disk or two to return to the States. It is not impossible and it would be a good gesture. So if you have any stacks that are in the public domain or are ShareWare send them to Background and we will ensure they get a wide distribution and a space in future Background's.
I hope you enjoyed this first edition of Background. Until February. I wish you all Happy HyperTalking

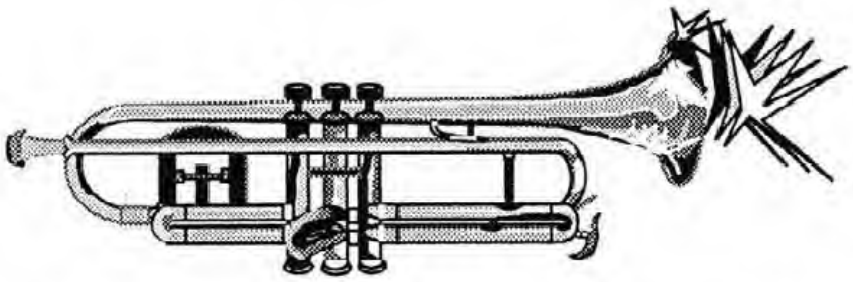
HYPERCARD STACK DISKS

061 - HYPERSTACKS 1
20 STACKS AND DOCUMENTATION.
062 - HYPERSTACKS 2
4 STACKS INCLUDING SOUNDS
063 - HYPERSTACKS 3
10 STACKS INCLUDING MARGIN NOTES
064 - HYPERSTACKS 4
OVER 15 STACKS INCLUDING SCRIPT REPORT.
065 - HYPERSTACKS 5
4 STACKS AND UTILITIES FOR YOUR OWN SOUNDS
066 - HYPERSTACKS 6
6 STACKS INCLUDING VISUAL EFFECTS
067 - HYPERSTACKS 7
6 STACKS CONTAINING DTP UTILITIES.
068 - HYPERSTACKS 8
9 USEFUL STACKS INCLUDING MACHELP
069 - HYPERSTACKS 9
5 STACKS INCLUDING AN INDEX TO MACWORLD
070 - HYPERSTACKS 10
6 STACKS ON COMMUNICATIONS.
271 - HYPERSTACKS 11
7 STACKS FOR FUN INCLUDING HYPERTRIP

Post-ART

and other offerings from Olduvai Software

presented by Irene Flaxman



Olduvai Software, Inc. is a newly-formed company with a stated aim 'to develop and publish innovative, affordable Macintosh software'.

We shall wait and see whether the company lives up to that basic aim, but they certainly seem to have started in the right way.

We have reproduced on this page, some of the pictures included on the Post-ART disks. This is a three-disk set of pictures by J. Ciccone, created using MacDraw, CricketDraw and Adobe Illustrator. As such, they can easily be sized by programs such as PageMaker (as I have done here). The set of pictures is described by the publishers as 'the first clip-art collection that is truly a work of art'. I cannot say that I like all of the pictures, but certainly some of them I like - and I can admire the hours of work that must have been expended in creating them. There are 48 pictures on the disks, and they are all full-page pictures, not small sketches as is often the case with clip-art libraries.

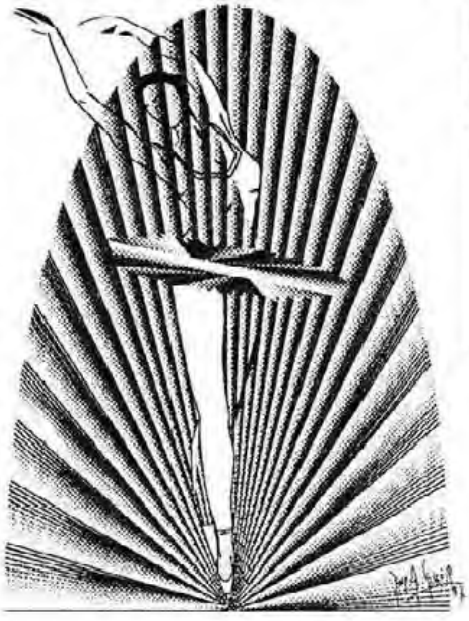
There is a surprising variety of styles included on the disks. I find this surprising, as they are all the work of a single artist, and I should have expected a certain similarity of style to be evident.

Postscript files of all the illustrations are available for an additional charge, should that be suitable for your needs - but I should imagine that most users would prefer the picture files as presented on the original disks.

Olduvai publish a number of other packages, some of which will be reviewed in future issues of the magazine.

These include Icon-It!, which allows you to create amenu-bar of icons for selecting menu functions, desk accesories, fkeys and macros. Also DA-Switcher, which allows an unlimited number of desk accessories to be made available.

Read-It! sounds interesting - it is described as 'a low-cost Optical Character Recognition software that works with any scanner, learns from new typefaces, and recognises typeset fonts and foreign characters'. We haven't seen it yet, but I hope the software lives up to that description!



Finally, the LaserAccelerator is a 68020/68881 accelerator and memory expansion board for the LaserWriter with an optional Font Server hard disk interface. Again, we haven't seen this, but it sounds good.

We met the Olduvai personnel at Boston MacWorld in August, and we were impressed by their enthusiasm. That is no bad comment for a new company, just setting out to distribute new products. Other visitors must have noticed that, too, as the stand was constantly busy.

Mark Lewis, of MacLine, must have shared our impressions, as he is carrying their software in his latest catalogue - and at affordable prices which have not been over-inflated in the conversion from US$ to £Sterling.

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MockPackage + (DA Term. Write Print Chart) 23.00
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CCCCCCortland

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Around the Shows.

Dougal Hendry staggers around three shows and here gives his candid opinion of what he saw!

CG87

The Film Festival

The Computer Graphics Show

The Computer Graphics Exhibition was held at the Wembley Conference Centre and my first impression being a Macintosh User was where were all the Macs?

There were precisely two Macs on show and both were Mac][‘s. The first was on the Letraset stand and was showing a colour DTP program from Lightspeed, who are nothing to do with Think Technologies, authors of the wonderful Lightspeed Pascal.

Hitachi showed that they have a nice colour monitor that works on the Mac][. And that was it for Apple.

Symbolics are the suppliers of some of the equipment used to generate video animations. I was struck by the superficial similarities of their user interface with Illustrator... They have a wonderful demonstration video ‘show reel’ that I hope to be able to borrow for a local group evening...

The major peripherals included colour printers wearing many different badges but mainly clones of the Mitsubishi 300dpi thermal transfer printer. It is an open secret that QMS are expected to bring in a version with a PostScript controller. But the price is going to be over £12,000 and the quality is not dramatically better than an Imagewriter 2. For the future, watch out for Canon. They were showing an amazing colour photo-copier. Actually, calling it a copier hardly does it justice. It ‘copies’ 35mm slides to A3 size, with a quality that I’d be prepared to display... Obviously, printers will appear in due course with this engine. As a copier it costs about £17,000 - I hate to think what sort of a BMW one could buy for the price of such a printer!

New Scanners I saw included a prototype of a scanner due to be launched in January. It’s hand-held and hand-propelled, just like the ultra-trendy copiers that are appearing. 200 and 400dpi versions are anticipated, with a choice of grey-level resolutions too. Projected prices for software, scanner and interface card start around £500. Interface card? Yes, it’s aimed at the PC market, and my suggestion that there were lots of people with Macs and a real need for cheap graphics input, seemed to come as a surprise. Anyone fancy helping to write some image-grabbing software and create the Mac interface?

Walking around the show, one was struck by the number of British companies that had grown up with the Apple][and gone on to the world of ‘professional graphics.’ Names like Robocom, Pluto, and Digisolve brought back fond memories.

The Film Festival in the evening was presented by Lesley Judd of MicroLive fame. I found her as irritating off-screen as on. I was really puzzled about the goals of this Festival because “synthetic movie” result’s in synthetic cartoons with a synthetic presenter like Max Headroom!

The films were made on various equipment from multiple Crays to “a humble Vax 11/780”.

The Hiroshima University entry was my nomination for “most realistic” it gave a trip through a city scene that looked like a clip from Thunderbirds - it looked more like a real model city than a bitmap

Second prize to “Red’s Dream” an unsold monocycle’s fantasy dream of circus stardom, full of humour, pathos and clever effects. But as a cartoon it wouldn’t get much recognition. The one that really sticks in my mind was a remarkable little film called “Luxo Junior”. It relates the triumph of youthful enthusiasm over experience - if that is not too pretentious for two Anglepoise lamps playing with a ball! Honestly! The ‘personalities’ are quite brilliantly expressed through their movement. This film just ‘has to be seen to be believed.’ And I can’t think of a better compliment for any film - let alone something generated entirely within a computer.

By the way, Red’s Dream and Luxo Jnr are products of a Company called Pixar, which is owned by Steve Jobs. Yes, that one.

The DTP Show

The DTP Show at the Business Design Centre in Islington overlapped with Computer Graphics 87 and Apple DTP accounted for only about a quarter of the show. IBM-style ‘Personal Publishing’ has already taken over.

During a stint on the Apple UK/dealer co-op stand, while floating around beating the Apple2000 drum, and acting as unpaid sales rep, I was struck by a rather unsettling notion. The Mac representation was deeply flawed. The Mac marketers were showing their very latest stuff. But Beta test versions, maybe alpha. Not for sale, not ready. Great for enthusiasts hoping to

see the way the wind is blowing. Bloody useless for the folk attending this show.

Half of them were traditional Printing industry people. Hard headed, but hardly flush with cash. Many from small companies. The rest seemed to be from MegaCorps, and finding out "What all this thingey is about."

I cannot imagine an audience that would be more put off by a system bomb dialog box. And they got them. All over the place.

The pity is that a solid demo of last year's Mac stuff would have blown the socks off most of the IBM material, and convinced the punters. Instead of which, too many of them showed Bomb Boxes.

But these people are just the market for HyperCard, and they loved it. Perhaps it will help Apple to break into the 'Personal Publishing' market...

OK, so what bears discussion, well

•Image Studio, (formerly The Realist), looks set to be a non-optional extra for all serious users of scanners. It is an image editor with magnification up to 1600%, with image processing tools, allowing edges to be sharpened for example. Pity, we couldn't see real printout though. Speak to Letraset.

•FullWrite was still at the same Beta version as at the PCW show.

•Apple's five and a quarter inch PC-compat drive exists, and seems to work from a Mac][at least.

Professional applications have started to come down from minis onto the Mac][, as exemplified by Interleaf. This is a full publishing package, requiring a minimum of a 5Meg Mac][!

The MacUser Show Visitor

The MacUser Show

The Cowboys Revenge !!

The American influence arrived in the MacUser Show in the form of an American Village - well all right a section of stands that was more like a hamlet. The popularity of this group of stands was the main talking point of the show because one Texan Ranger had packed his suitcase with cheapo Mac Software. Simple things like 4th Dimension at £450 inc - MicroSoft Works £180 and many more. The best part was that included VAT and the Texan was still making enough to fly four people over here and have a good weeks holiday. He also admitted that he would be "quids in" after paying all those expenses.

MacLine were getting a little price competition from MacSoft, but only on special 'Show Offers'. Concise Computers sold out of their stock of second-hand/ obsolete/ remaindered bargain software long before the end of the show.

Product trends

Hypercard is going to be massive. The only thing I have encountered with a similar impact and potential is VisiCalc. People bought disk drives and an Apple][to run VisiCalc. They are going to buy Hard Disks and 2 Meg Macs to run HyperCard. Mark my words...

Show guide stacks had been prepared. Interestingly, one exhibitor claimed credit for producing them, although they were a straight crib from the Boston show guide - only the data was changed.

At least one exhibitor, Stirling Microsystems, had their product catalogue available as a stack. Computers Unlimited kept on promising the HyperCard Handbook 'Tomorrow, honestly,' but couldn't produce it by the end of the show. They could have sold a couple of thousand copies.

The price tumble on hard disks is starting with the new baby Qisk at £425 (+ VAT, etc). An interesting product was the SCSI Manager software bundled with the Cirrus drives. This is called 'Silver Lining' and allows all sorts of interesting options like combining SCSI devices, so that they can be treated as a single big drive. They also provide an official set of MacZap parameters for data recovery, should the unmentionable actually happen.

The removable media SCSI disks first seen at the Rotterdam Expo are now starting to blossom and the one important thing for buyers to check is exactly how the software recognises that a disk has been changed - do you have to use a DA to 'Mount the New Volume' ? Glamorous demonstrators tend to be a bit vague on specifics.

The new 10 Meg Hard Shell drives using the Kodak format seems to be gaining acceptance. Distinguishing feature: what does the drive do when not being accessed? Does it stop - giving slower response, or run constantly - potentially wearing out the surface of what is actually a floppy (the head is in contact with the disk) ? Jasmine alias MacEurope, have now got stocks badged as Promac. Quisk showed a non-working prototype - we should be seeing that really soon.

Dayna - the MacCharlie people were showing PC compatible drives which Pic'n'Mix from any PC format drive, but you can only have two in your box! Complete with software for changing file formats, (between say WordStar and MacWrite), the box costs about £1100, depending on your choice of drives, of course!

Go-Mark talked about the Peripheral Land 'Infinity 2' whilst showing the Infinity 1. This uses removable 10 Meg floppies! Real Floppies!! These are much cheaper, but more vulnerable, than than the hard-shelled variety. It can also read and write the PC/XT 720k and PC/AT 1.2 meg formats. An interesting combination for about $1100, although likely to be £1100...

But SCSI can be used for things other than disks...

The Personal Laser from P&P Micro Distributors was on show the print quality looked pretty good, but it was very hard to tell

what it would be like to live with and what it's real limitations might prove to be. Note that you need a hard disk to hold its fonts, though.

Interfaces are coming...

A SCSI to IEEE-488 box is among the National Instrument peripherals shown by Amplicon. The IEEE interface, aka HP-IB, is much used on intelligent test and measurement instruments. Now can I have a cheap, generalised digital I/O please? Such a 'user port' will really open up the Mac system...

Software Update....

Software on show included Canvas which looks very interesting indeed. It is pitched between Illustrator and SuperPaint, with the majority of its power available as a DA. The Laser Art-tool market is hotting up and you can expect many new products within the next few months including items from Aldus.

DataBases are another new area of competition now that dBase Mac has actually appeared, although I remember seeing an 'almost ready' version a year ago. Unfortunately, the Run Time module has not yet been seen at all. (This is essential if you hope to sell programs written IN the thing, rather than just FOR the package.)

McMax from Nantucket appears to be more dBase 3 compatible than Ashton Tate's product! It seems you could develop PC applications on your Mac with this. I really look forward to getting my hands on a review copy. The Mac Run Time pack is included. 4th Dimension was shown, but can anything that massive actually be used? And what a price - I wonder who is running around in a new Jag.

Against this competition, Borland have inexplicably decided to kick Reflex well up market. While some of the new features of Reflex+ are undoubtedly worthwhile, it does look a bit like greed...

Word Processors. Suddenly there is a new battleground below the pukka DTP programs. This territory was the exclusive preserve of Word 3, but now that FullWrite has actually arrived (well a useful version that only crashes about once an hour was on show), another new contender appears in the form of Word Perfect. This is the top dog in the PC market, yet seems slightly more of a Mac program than Word. The Page Preview appeared to be much faster than Word's. Incidentally the PC market now has Word 4 and Windows Excel, which boasts some features beyond the scope of the Mac version, cell comments for example. Are we a minority or an endangered species?

Mac II is here with a vengence. Stands without one were the exception rather than the rule. Mac II cards were beginning to appear

SuperMac had one show-stopper on their massive stand, a large colour screen, driven by three colour cards, giving 24bits of colour resolution. This produces a display more akin to a slide projector than a television.

Meanwhile, on the club stand...

Well we could have done with at least four times the space and four times the staff - our stand was besieged from about 11 to 6.15. We had a super time and hopefully put on one of our better performances with a neat stand courtesy of Graham Attwood, Derek Church and Richard Wilday. The build up was really the way to have a heart attack - too few entrances and long waits for the one lift in the building. But on that Monday night we left the stand looking just right.

The sweatshirts were well different - the sort of thing we normally do to attract attention - needless to say we could have sold hundreds. We were lucky in having a stand with some standing room off the stand because much of the day it was just impossible to stand on the stand. We dealt with many technical queries and of course took plenty of memberships - the quality of our new members was high with many new areas opening up on the Macintosh. I must admit I was stunned at the places that Macs have creapt into, although in many places they were very lonley amongst the IBM's.

So I suppose we will have to wait now for February and the Which Computer Show to see anything new and the buzz is new machines early in the New Year - think of flat thin plastic macs!

No you wally not your luggable rain coat!

Next years show is provisionally booked for the same time with another mid-week show. We have spoken to the organisers and suggested that adding the Friday would enhance the attendence figures - if you did not get to MacUser this year but think Friday should be added write to MacUser and tell them - I have been assured they will listen to the comments from the marketplace!

Well its time to get my Christmas wish list done so until next year -

Bye....and enjoy your Christmas and New Year.

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SuperGlue	£89.95	£59.00
Symmetry		
ACTA	£54.95	£39.00
☛ PictureBase	£74.95	£39.00
Target Software		
Scoop*	£495.00	£325.00
T/Maker		
Click Art *(all same price)*	£49.95	£30.00
Click Art PostScript	£129.95	£85.00
WriteNow	£165.00	£99.00
Telos		
☛ Filevision	£175.00	£35.00
Think Technology		
Capps Prime	£74.95	£50.00
HFS Navigator	£69.95	£45.00
inBox Starter Kit	£350.00	£235.00
☛ LaserSpeed	£80.00	£42.50
☛ L/Speed Office Pak	£425.00	£225.00
Lightspeed C	£150.00	£100.00
Lightspeed Pascal	£110.00	£75.00

HARDWARE

	List Price	MacSoft Price
Cirrus		
Cirrus SCSI Drives are exciting and excellent performers, offering impressive speed, attractive design and quiet operation. Though very small (3" x 6" x 9") and lightweight (about 4lbs), they are constructed of quality materials designed to last.. Simply put, they are powerful drives with powerful software, and a joy to work with.		
Slot Machine 20	£649.00	£445.00
Slot Machine 30	£799.00	£545.00
Slot Machine 40	£999.00	£695.00
Slot Machine 60	£1299.00	£895.00
20 to 60 Mbyte Internal Mac SE Hard Drives		
Cirrus 20	£799.00	£545.00
Cirrus 30	£949.00	£645.00
Cirrus 40	£1149.00	£795.00
Cirrus 60	£1449.00	£995.00
20 to 60 Mbyte External Mac Drives		
Cirrus 40T	£1149.00	£795.00
40Mb Tape Backup Unit		
Farallon		
Farallon, makers of PhoneNET, introduce MacRecorder - which records real sounds into your Mac. Easy to use, just hold in your hand and record from TV, etc, or speak into the mike. Includes HyperSound stackware to use sounds in HyperCard, and AudioFile software for editing.		
MacRecorder*	£199.00	£139.00
PhoneNET	*Call for Details*	
Memory (RAM) Upgrades		
Guaranteed high quality memory upgrades for your Mac at prices you can't afford to turn down. Full instructions included, or send your Mac to us for fitting (£50 extra)		
☛ 2 Mb for Plus	£299.00	£160.00
2.5 Mb for Plus,SE,II	£545.00	£375.00
4 Mb for Plus,SE,II	£1,200.00	£750.00
NB: RAM size quoted is total after expansion.		

FONTS

	List Price	MacSoft Price
Adobe Typefaces		
Helvetica Condensed	£340.00	£275.00
ITC Franklin Gothic	£255.00	£205.00
Palatino, ITC Bookman, New Century Schoolbook, Optima, ITC Souvenir, ITC Lubalin Graph, ITC Garamond, ITC Benguiat/ITC Friz Quadarata, Glypha, Helvetica Light/Black, Trump Mediaeval, Melior, ITC Galliard, ITC Baskerville, ITC Korinna, Goudy Oldstyle, ITCCheltenham, Bodino, Letter Gothic, and Prestige Elite		
each are	£170.00	£135.00
ITC Zapf Chancery/Dingbats, ITC American Typewriter/Machine, Century Old Style Roman, and Orator		
each are	£135.00	£110.00
Sonata and Park Avenue		
each are	£85.00	£70.00

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Gallery: Useful pictures,borders, maps, trademarks etc.
Symbols: Tourism, Animals, Farming, Programming etc.
Hands: Tradesmen, Food, Leisure etc.
Food & Drink: Illustrations of Food and Drink.
Display Fonts: Decorative lettering (inc.Music & Border Fonts)
UK Atlas: Roads,rivers,railways,airports,counties,cities etc (Inlcuding London Underground map)

One Instant Art disk costs £29; two cost £56; three cost £81; four cost £104, five cost £125; and all six cost £144.

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Specify MacPaint, PICT, or PageMaker format. Costs £49
Instant sampler disk for only £6.00

LaserWriter-compatible fonts that download automatically for immediate use.

GreyFonts

Now you can print in 9 grey shades on your LaserWriter! Each package contains nine different grey shades for the Laser font you want. GreyFonts available include: Times, Helvetica, Avant Garde, Bookman, N Helvetica Narrow, Palatino, Symbol & Zapf Dingbats. All the usual style options availble, such as Bold, Italic, Underline, Outline, & Shadow.
1 GreyFont costs £49; 2 cost £94; 3 cost £134; 4 cost £169; 5 cost £199; 6 cost £224; 7 cost £244; & all 8 cost £259

GhostFonts

GhostFonts allow you to print LaserWriter fonts as backgound, or shaded text without outlines. GhostFonts come in Light, Medium & Dark shades. Background printing works in programs allowing mixing of text & graphics, eg: PageMaker, MacDraw, SuperPaint.
GhostFonts for the LaserWriter includes Helvetica,Times & Symbol & costs £45. GhostFonts for the LaserWriter Plus also includes Avant Garde, Palatino, Bookman, Dingbats, & Helvetica Narrow, & costs £69.

Microsoft Word 3

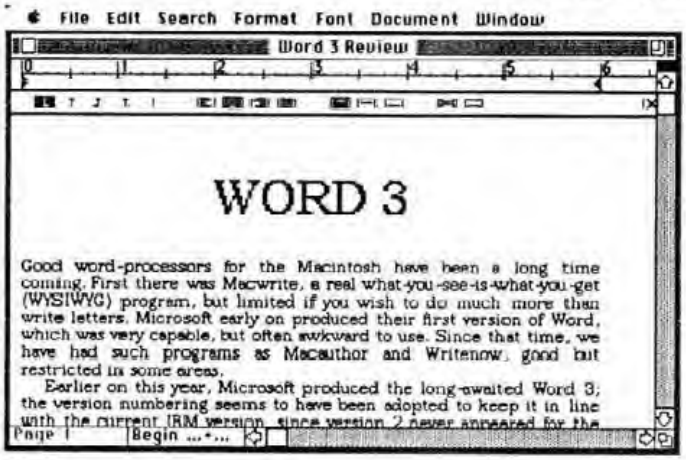
An in-depth look at the latest offering from MicroSoft by Nigel Strudwick.

Good word-processors for the Macintosh have been a long time coming. First there was Macwrite, a real what-you-see-is-what-you-get (WYSIWYG) program, but limited if you wish to do much more than write letters. Microsoft early on produced their first version of Word, which was very capable, but often awkward to use. Since that time, we have had such programs as Macauthor and Writenow, good but restricted in some areas.

Earlier on this year, Microsoft produced the long-awaited Word 3; the version numbering seems to have been adopted to keep it in line with the current IBM version, since version 2 never appeared for the Mac as far as I am aware. It is their attempt to produce a really high-powered word-processing program, which will be found acceptable in a wide variety of applications. It has generally found great favour, for example in the review in PCW and also in users' comments in BYTE. In this review, I can only really consider a few of its capabilities, although I have had considerable experience this past summer with the program in the writing of a medium-sized book. This review assumes that readers are familiar with some type of word-processing on the Mac.

General Description

Like Word version 1, Word 3 views a document as a series of paragraphs - its definition of the latter is any line between two hard carriage returns. With each paragraph is stored its own format, which can be varied at will but also globally changed (see below). It is possible to enter your text in any of the fonts stored in your system file, and in the usual variety of Mac styles (bold, italic, underline and so on). Headers and footers, with page numbers, date and time can be used, text may be put into footnotes, graphics inserted into the text, and mail-merges accomplished. The number of documents open at one time seems to be restricted only by memory, making switching between them very easy; it is also possible to open two windows on the same document.



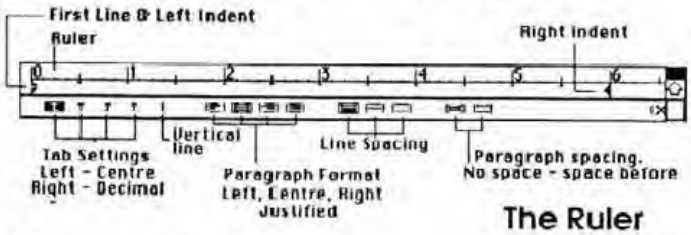
Ease of use

Although the mouse makes certain operations very much easier than in the old days, there is no doubt that, when typing continuously, continually having to take one's hands off the keyboard to move the insertion position or to highlight text can be a pain. Microsoft have been concerned to get round this, and virtually every possible mouse movement has a keyboard equivalent. For example, the numeric keypad defaults to operating as a cursor control area for larger movements, reverting to its proper function at a press of the Clear key. Movement by character, word, sentence and paragraph is thus possible with various key combinations, and pressing the shift key as well brings in the possibility of highlighting.

It is also possible to select menu commands from the keyboard. Pressing the "." on the keypad darkens the menu bar, and the contents of the individual menus can then be accessed by use of the cursor arrow keys. In dialogue boxes, this full stop in conjunction with the "0" allows one to pass through the various buttons and boxes without using the mouse. Only in the file selection boxes and in parts of the Help system must one at times have recourse to the mouse.

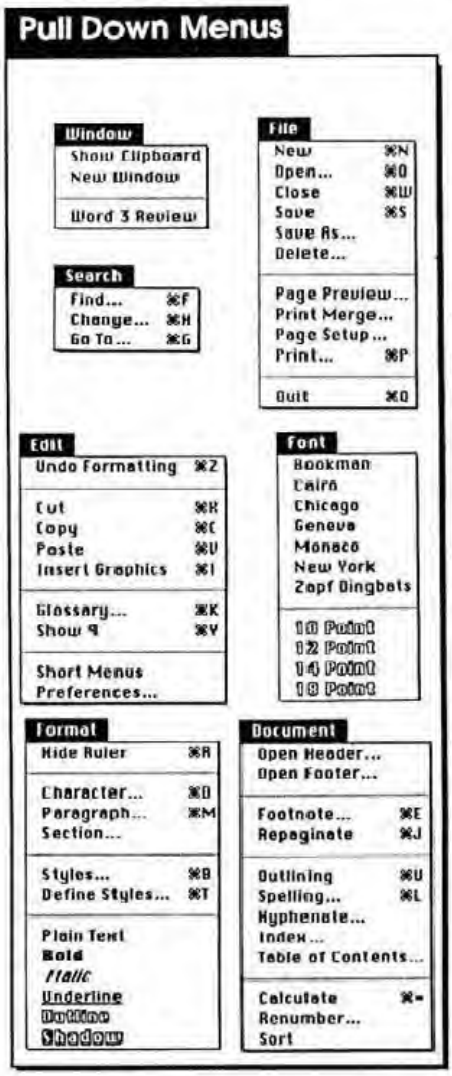
For beginners to the program, there is the option of long or short menus. The "short" option omits some of the more involved functions, allowing the user to get used to the basic idea without being overwhelmed by the possibilities. Once you have gained more experience, the menus themselves can be customised, by adding or removing various options. For example, it is not possible on the Font menu to show every font in the system file; by using the add and remove options one can include just those fonts one uses normally. A menu called "Work" can be created to include frequently used glossary text and styles.

A very good Help system comes with the program. This makes constant reference to the 450 page manual, but recourse to this



The Ruler

is only necessary on certain points of detail, or where one needs visual examples. When using particular commands with dialogue and other boxes, Help is usually context sensitive.

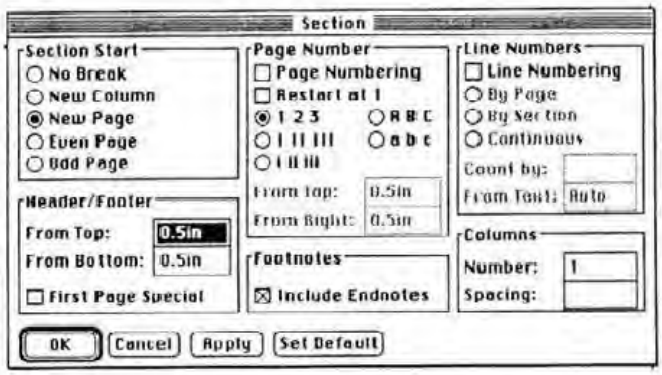


Special Features

For many users, it will not be necessary to delve deeply into the more powerful features of the program. For others, however, this is where the attraction of Word 3 lies. I can only mention those which particularly appeal to me. In addition to those below, all the basic word-processing operations are present; there is also a comprehensive mail-merge and a basic, if unintuitive, outlining system.

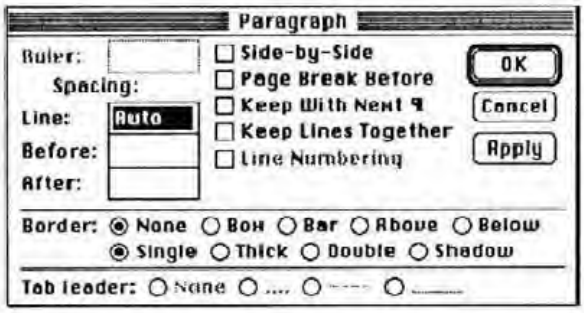
Styles:

This is an extension of paragraph formatting. Each style has a name, and each paragraph must have a style. Some standard styles are defined, but one can modify these, and build one's own. Styles are easily modified using the "Define Styles" command, and the attraction of this for me is that modifications to a style are immediately transmitted to every paragraph in that style in the document, and to other styles based on the modified style. For example, my indented paragraphs are in the "Normal" style, and headings etc are modified versions of this. If I change the font or the line length of "Normal", then the change is mirrored in virtually every part of the document. Much quicker than highlighting the various parts of the document. Adding your styles to the default list means that they are incorporated into every new file; styles can also be copied from other documents.



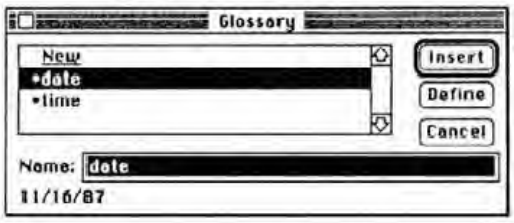
Individual Paragraph Formatting:

The Paragraph command is very powerful: as well as side-by-side, one can specify the amount of blank space before and after a paragraph, thus eliminating the need to type in blank lines. It is also possible to specify paragraphs to be kept together, and whether a page break may occur in the middle of a paragraph. The basic formatting (justification, placement of tabs etc) can be done simply with the use of the ruler command.



Columns:

It is possible to have multiple columns on one page. Snaking, newspaper-like columns are available through the Section options, while parallel side-by-side columns of text may be had through the Paragraph command.



Sections:

The basic divisions of a document. These allow you to change the number of columns, how the page numbers will print (there are several different formats), and whether the section begins on the same page, the next page and so on. Thus it is now possible to vary the number of columns within one page.

Footnotes:

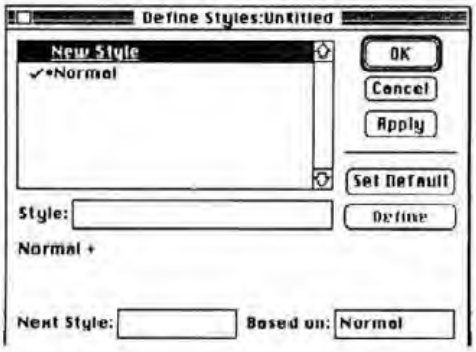
Word 3 gives more control over these than any other program I have yet seen on the Mac. Footnotes are automatically numbered and renumbered, and one can place them at the bottom of the page or at the end of the document. They can be numbered by page or consecutively. It is even possible to alter the separating line which appears between the main text and the footnotes.

Index and table of contents:

Indices and tables of contents can be automatically produced from a document. By placing ".c." or ".i." before the text you wish to include in the table/index, and running the appropriate command, the document will be repaginated and the table of contents inserted at the beginning or the index added at the end. The ".c." must additionally be formatted as hidden text or else the program will ignore it; "hidden text" enables you to hide items (such as comments) that you do not wish to see on the final printed page, and the display of this may be turned on and off as required.

Spelling and hyphenation:

The spelling checker enables you to look for mistakes in selected areas of text, or in the whole document. Words can be added to the dictionary which comes with the program; Word 3 will suggest alternative spellings for a word it does not recognise. The checker is not, however, interactive. Automatic hyphenation is a luxury item which does improve the appearance of your printed page, by allowing more words to fit on a line and thus reducing the amount of added white space in justified text. The type of hyphens added are "optional" ones, those that only appear when a word may be broken at the end of a line. It is possible for it to work on the whole text or selections; one can approve or reject proposed hyphenations or one can simply leave the program to make all the decisions itself. Hyphenation algorithms are extremely complex, and that in Word 3 seems to operate partly on a knowledge of how certain words should be hyphenated and partly on analysing their syllabic structure. Be warned: it does occasionally misplace hyphens.



Page Preview:

This option allows you to see two whole pages on the screen at reduced size as they will print. A magnifying glass icon allows you to examine the text at full size. It is also possible to change the margins of the document in this way, and also to add page numbers. All in all, a valuable check on the correctness of your document.

Paragraph renumber:

The program searches for already numbered paragraphs in the selection you have specified, notes the format of the number (many are possible, such as 1, 2, 3... or 1.1, 1.2...), and then renumbers them for you. Alternatively, you can ask for every previously unnumbered paragraph to be renumbered. This is very useful when you are re-arranging a document.

Linked documents:

It is possible, from the Page Layout command, to specify another document which will be treated as following on directly from the present one. This applies to printing, and to the creation of tables of contents and indices. The page numbers of the second document can be made to follow on from those of the first by leaving the page number box blank.

Mathematical typesetting:

By using a special character followed by expressions from a simple command language, quite complex equations can be built up, and most important of all, they can be seen in WYSIWYG form. One would normally require a separate program to achieve this.

Dislikes

The subject of dislikes is also a very personal one. Most of the things that have annoyed me are small aspects of the more complex parts of the program, and which may very well not bother many readers.

Inflexible headers and footers:

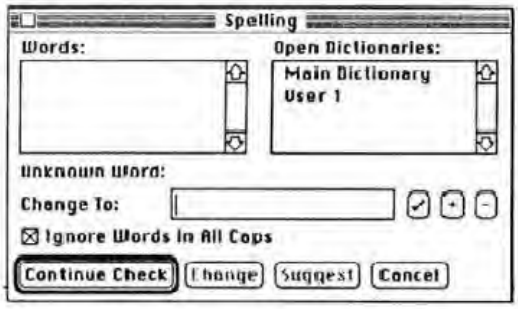
Headers and footers are dealt with in Word via Sections, and only one of each is allowed per Section. I like to update the header continually so as to facilitate finding particular pages of the printed document, and this is simply not possible without increasing the number of sections (see next comment). Writenow is a far more capable program in this area.

Section restrictions:

Unlike Word 1, Word 3 allows you to have more than one section per page. However, if you use footnotes, then they are printed at the end of each section, even if that is half way down the page and there is further text to come. I would like to have the option of letting the footnoting continue regardless of the sections. Basically, Microsoft do not seem to have considered the Section as being used other than as a totally self-contained part of a document, e.g. an index following the main text.

Not quite WYSIWYG:

For example, side-by-side paragraphs appear in editing mode below each other, or multiple columns show as one long thin column; it is only in the Page Preview option that the actual layout is to be seen. To be fair to the authors, Page Preview was clearly provided to get round this sort of problem.

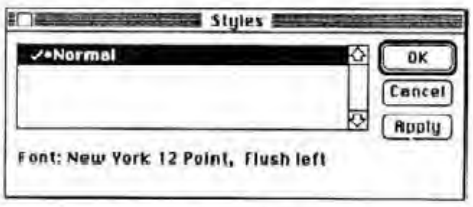


No dynamic repagination:

It is necessary to repaginate documents explicitly before printing, or wait for it to be done for you by the table of contents, index or Page Preview options. While not too great a problem, it does mean waiting, and there is often a measure of uncertainty as to whether one's document has been properly paginated before printing.

Unable to find & replace character styles:

I have yet to see a Mac WP program which allows you to type in your search and replace text in anything other than the basic system Chicago font with a plain style. It so happens that I often want to bold every example of a certain word or index certain things in a particular style. Again, to be fair to Microsoft, there is something of a way round this, albeit a bit long-winded: the desired replacement text with full formatting can be placed in the clipboard, and the search text can then be replaced by the contents of said clipboard. However, there is still no way to search for bolded



text, or text in a particular font. Perhaps Microsoft should add a "search for clipboard" option.

Problems

I found no obvious bugs, despite the complexity of some of the documents, and I have had only one crash attributable to the program. However, others have clearly had problems, and it has been said to me that I must have been under a very benign guardian angel! As a result Microsoft have brought out version 3.01. Certain minor details of a variety of commands seem to be different, but not in a way that will affect the user. For example, 3.00, when printing linked documents, brings them all into memory before printing, and thus can easily run out of space (as happened to me). In 3.01, each is dealt with in turn, and at the end of printing only the original remains in memory. When compiling a table of contents or index in 3.01, it is unclear to me whether the repagination of linked documents is actually preserved, since those documents never remain in the editor - an example of the problems inherent without dynamic pagination.

Conclusions

There can be little doubt that this program is the best word-processor currently available for the Macintosh, and I would be surprised to find a superior one on any machine. As with any program that is intended for a wide variety of users, there are inevitably certain areas where it performs less well than others. It seems pointless to use Word 3 just for correspondence, but once documents become more complex, you will realise just what a capable program it is. If one is producing long documents, such as books, and does not require the very complex and special effects possible with a page layout program, then Word 3 will do as good a job as those programs and with far less effort on your part!

Editors Note:
FullWrite Professional will be released in the next week or two and is billed as a top-end W.P application. We hope to bring a review as soon as possible.

WORKSHOP 2000

You asked for hands on Workshops so here are your first two for 1988. Please mark the dates in your diaries. Just in case you forget we will remind you again in the February issue of the magazine.

Saturday March 12th 1988
10am - 4pm

Subjects

DeskTop Publishing
Hypercard

Venue

Mark Colett Pavillion
Kemsing
Nr Sevenoaks
Kent

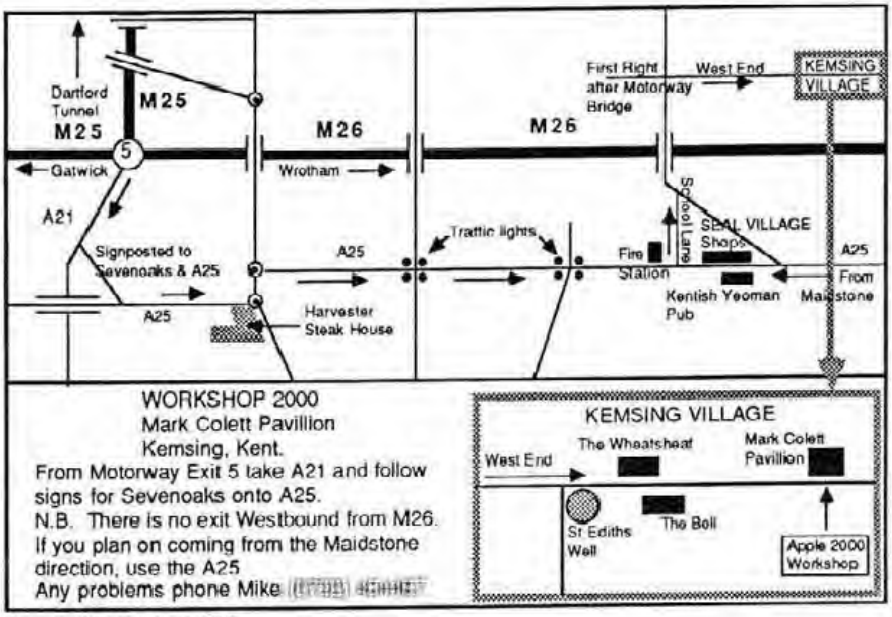
Saturday March 26th 1988
10am - 4pm

Subjects

Hypercard
Graphics/Scanning

Venue

Celtip Computers
AppleCentre
Lower Mill Street
Kidderminster



Drawn by Mike Davies ©1987
using a Cray Super Computer !

Other events in the planning stage are a Workshop running alongside the AGM in London during April and some more local Workshops. If you have a particular subject you would like covered let us know now.

PageTutor

Irene Flaxman looks at a 'teach-yourself' course for Macintosh users, by Personal Training Systems

I have previously reviewed two sets of training modules from Personal Training Systems and I was impressed. I have now had an opportunity to work through the PageTutor modules, which provide tuition for the use of PageMaker v2.0.

I was impressed by the other sets of training modules, and I was not disappointed by the PageTutor series. The courses are comprehensive, easy to follow, and even highlight some 'shortcuts' for use in the program.

The standard time taken to complete each is estimated to be 90 minutes. The series comprises three courses:

Beginning PageMaker 2.0
Intermediate PageMaker 2.0
Tips & Techniques

Each course pack comprises a disk of sample files for you to work on, a reference card, and an audio diskette. To use the training modules, you will need at least a Macintosh Plus, two disk drives, a printer, PageMaker v2.0, an audio tape player, and the PageTutor training package. The number of lessons varies from seven to eleven, each course taking around 90 minutes to complete. The actual time taken will be dependant on your own confidence and requirements, as you can go back to review any topics you do not immediately understand (for example, I listened to the lesson on hyphenation more than once). Each course finishes with an example for you to work through without the benefit of guidance from the tutors, but you are advised of the appropriate lesson for revision, and can check the lesson's summary details on the reference card, should you find that you cannot complete the exercise.

Although some of us have been using PageMaker for some time, and therefore take for granted many of its facilities, it has to be recognised that this is a complex piece of software, with many features and facilities for the new user to learn. Indeed, PageMaker v2.0 has many features that are new, and were not available under the previous versions. The courses do not highlight the differences, but concentrate on the facilities offered by the program.

I found a few anomalies between the samples on disk and the verbal descriptions on tape. An example of the problem was in the hyphenation lesson, when words highlighted for 'prompted hyphenation' differed from those mentioned in the script. This did not detract from the value of the lessons, but it was a little disconcerting. The other anomaly we always have, of course, is that the sample documents are set up to conform to American paper sizes. This did not cause me any problems, though.

Topics covered by the three modules include:

Beginning: Creating a newsletter, Placing text, Placing graphics, Adding captions, Adding finishing touches, Printing.

Intermediate: Creating master pages, Cropping graphics, Inserting/deleting pages, More finishing touches, Reshaping text, Changing margins, Varying the number of columns.

Tips & Techniques: Lengthening/shortening a story, Exporting files, Hyphenation, Kerning, Wrap around graphics, Drop caps, Drop shadows, Changing defaults.

Quite a schedule to work through, but it does save you from reading the manual whilst still learning some of the finer points of the program.

Is it worthwhile, to use a training package such as this? When you consider thesums invested in hardware and software, the costs of these training courses is small, but it is worthwhile - if you have invested in the technology, you should aim to make the best use of it, and this can best be achieved by training. Consider the costs of attendinga course by your local dealer or consultant, and work out for yourself which type of training is the more cost-effective. If you go along the route of buying in a 'teach yourself' course, such as this, it can be completed at your own pace, and in yur own time, and it is always available for new members of staff - at no extra cost (other than their time, of course). To enroll on a training course will cost a tidy sum for each individual involved - but you do have the advantage of being able to question the 'expert'.

Personally, I like this system. I find them easy to follow, and any questions can usually be answered by repeating a section of the course. It is all taken at the individual's pace, and because the student is using the actual program to work through examples, mistakes can be made and rectified - just as happens in the normal working environment.

I have to admit that the choice of programs for which Personal Training Systems have produced training modules is quite interesting. They have selected three of the Microsoft library - Excel, Word and Works - in addition to PageMaker, with DbaseMac on the way. All powerful programs, with many features worthy of note. I think they have chosen wisely, but I wonder what will be next?

Available from Mayfield (UK) Ltd, 96R Walton Road, East Molesey, Surrey, KT8 0DL. The cost is £39.95 (plus VAT) per course.

TX300 Scanner

Norah Arnold reviews the TX-300 Image Scanner from Taxan

In the early days of the Apple II getting a good piece of artwork on the screen was an achievement. It not only required a great deal of technical knowledge as to the functioning of the high-res screen but it also required quite a lot of patience too. I almost shudder to think that I once wrote a bit-image editor in 6502 assembly language just because I wanted to put a certain picture on the screen and couldn't think of a better way to do it.

At the present time, if you are a Macintosh owner, getting good graphics on the screen presents no real problems. There are many excellent drawing programs available for creating all kinds of graphic effects at many different levels of resolution. Yet once you own a Macintosh and an ImageWriter there is always the thought at the back of your mind that it would be great to own a scanner. This thought seems to take on even larger proportions if you are lucky enough to own a LaserWriter.

This is where you ought to take a look at the Taxan 300 Image Scanner. In appearance it looks just like all the other sheet-fed scanners on the market, but at a retail price of £1199 it is far more accessible than some.

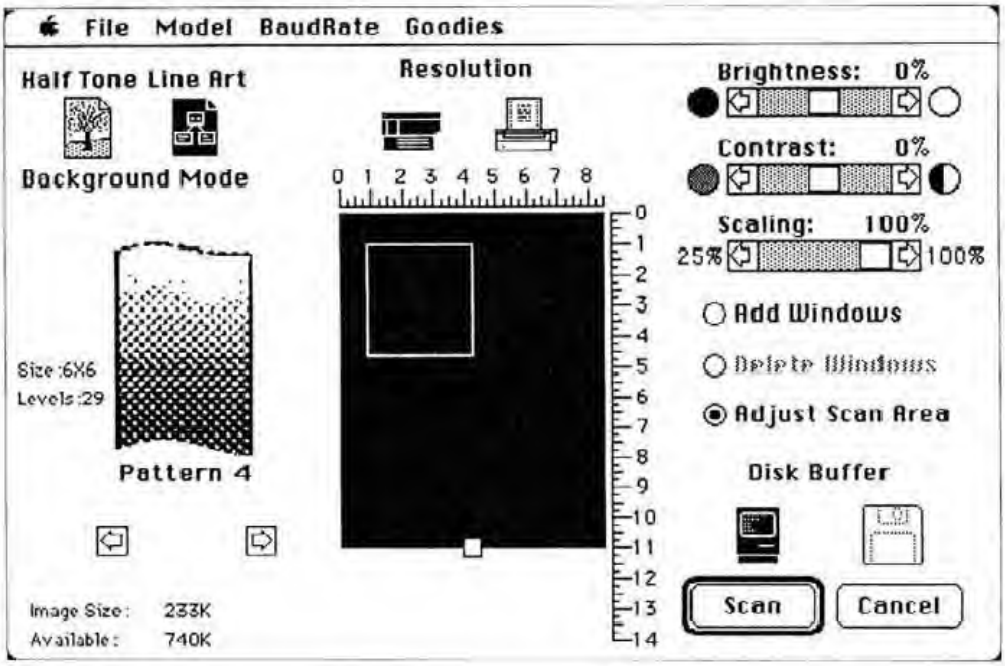
The TX-300 uses a Taxan version of the VersaScan Plus software developed by Microtek. The software is being continually assessed and improved and there have been several improvements during the time that I have used the scanner. The version of VersaScan Plus that I have used for this review is 1.02, dated 14th August, 1987. I used it with a Macintosh Plus with a 20 MByte SCSI hard disk. The scanner could be used with a Macintosh Plus with two 800K drives but there would be some limitation on the size and resolution of a saved image. The scanner is compatible with the Macintosh SE, and with a Macintosh II with ROM version 1.17 or later.

The Golden-Crested Wren

Getting Started

When you first double-click on the VersaScan Plus application icon a menu bar appears together with a small Tools window. The menus hold few surprises and are easily understandable to someone familiar with other Mac applications. Under the Apple Menu there is access to a Help facility, but I can't remember having to use it.

The File Menu gets used most of all, and that is where you begin by clicking on 'Scan New'. The screen shown at the bottom of the page appears and you are able to set up the scanner options to suit your needs.



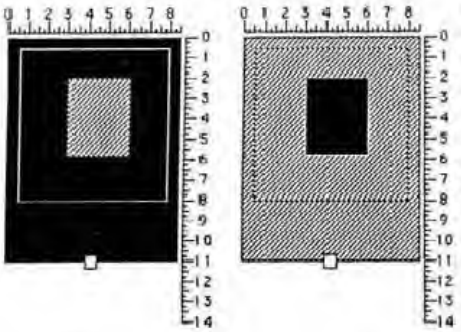
Scanning Modes

The Taxan scanner aims to produce a good quality image from photographs or line art by giving the user a great deal of flexibility in varying the settings for contrast, brightness, scaling and patterns.

Two scanning modes are provided, plus a combination of the two modes. Drawings, engravings and wood-cuts are best suited to be scanned as line art, while halftone mode is better for photographs or drawings with de-

tailed or continuous shading.

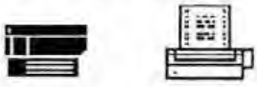
Scan Windows



The combination of the two modes occurs when 'scan windows' are defined on the opposing type of scan area. This means that the majority of the scan is done in one mode, eg. line art, while the area covered by the smaller window is done in the other mode, in this case, halftone. There are not many cases where one would wish to do this, but it is a very good option to have and produces some interesting scans.

For a normal single mode scan, however, all you do is select the correct scan mode, ie. line art or halftone, and use the mouse to draw a scan area coinciding with the area of the paper you wish to scan. The 'length of paper' setting can be adjusted, but this only needs to be done where the length of paper exceeds eleven inches.

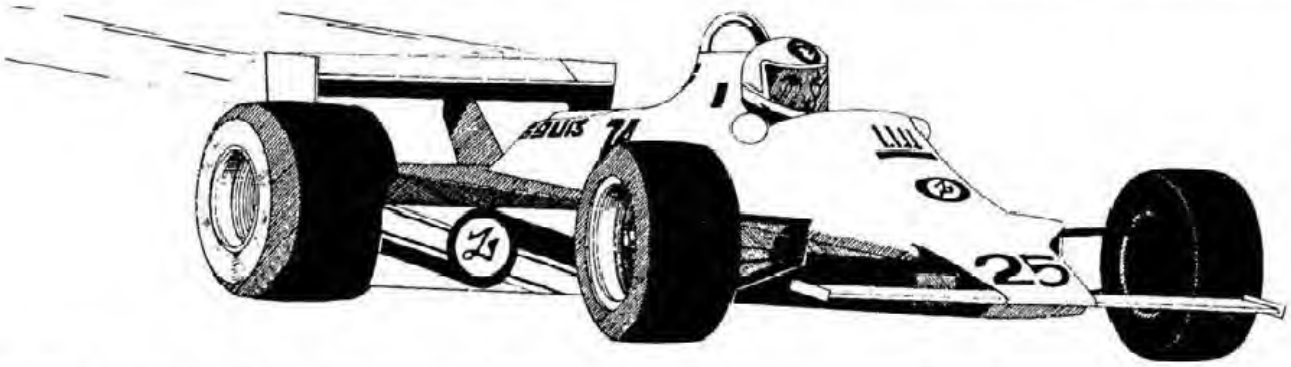
Resolution



Selecting an output device, either a LaserWriter or an ImageWriter, can be done by clicking on the appropriate icon. This choice decides the resolution of the output, for the LaserWriter it will be 300 dpi (dots per inch), while for the ImageWriter it falls to 72 dpi. Most of my scans have been done at 300 dpi and printed on a LaserWriter Plus. The resolution of the scan also affects the size of the saved image and the user must make sure that disk space is available to accomodate the image, and a hard disk certainly helps if you are scanning at 300 dpi.

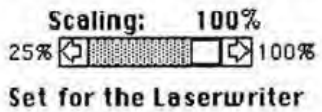
Brightness and Contrast

The settings for brightness and contrast are used to define a 'threshold value' which determines whether or not a particular dot is interpreted as white or black. The choices are made by sliding the white box to the setting you want. Not every possible choice is available, however, and the box will 'jump' to the nearest predetermined setting. I found that the settings available did enable me to get the result I wanted; the biggest constraint, as always, being the quality of the image being scanned.

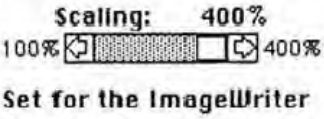


Scaling

With resolution set to 300 dpi for the LaserWriter, then one has the choice of scanning at 100% size or



Set for the Laserwriter



Set for the ImageWriter

smaller. If the image is scaled to be scanned at 25% of the size of the original, then it will actually be scanned at 75 dpi, resampled, and put together at 300 dpi. This process will produce a 300/75 dpi or 25% image.

If the resolution is set to 72 dpi for the ImageWriter and MacPaint, then one can choose to scan at 400% of original size. This means that if the image is later placed in a desk-top publishing program such as PageMaker™, it can be reduced to original size again, thus improving the quality of the printed image.

Patterns

True halftoning, using dots of different sizes to represent gray scales is difficult on scanners where the data is digital, either on or off, black or white, and all the dots are the same size. The effect of shading must be achieved by grouping the dots into square matrices.

On the TX-300 various matrices are available. The very small matrices are useful for showing great detail but are unable to show many gray scales. On the other hand, the larger matrices can give up to 64 gray levels but do not show as much detail in the picture.

Within the group of matrices or patterns on offer, the dots are aligned differently giving differing visual effects. All the example scans within this review have been done on the default settings for halftones or line art. It is important to see what result can be obtained without the user

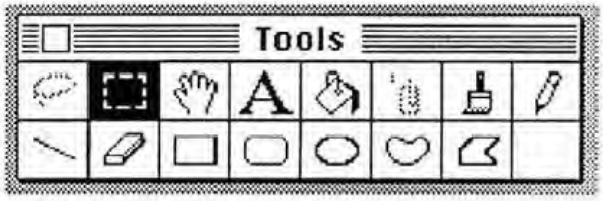
putting in a great deal of effort to adjust the settings. Naturally, one does need to change the settings occasionally, mainly due to limitations in the quality of the image presented for scanning.

Settings Files

Once you have used the scanner for a few sessions, you get to know which brightness and contrast settings you prefer for each of the types of artwork which you may have to scan. If you wish you may use the 'Save Auto Settings' selection so that the current settings are saved to the system file containing the default settings, and will reappear each time you select 'Scan New'. Settings may also be saved to a separate file and reloaded when necessary.

Disk Buffer

In the bottom left hand corner of the screen there is a reminder of the total amount of computer memory available and the size of the file which will result from a scan. If the image size is less than the available memory, then the scan will be saved in memory and, in the bottom right hand corner, the Macintosh icon will be selected. Should the image size outstrip the memory available, then the disk icon will automatically be selected and the image will be saved to a disk file. I notice that the manual, which is very down to earth and helpful, states specifically that the disk icon represents a hard disk.

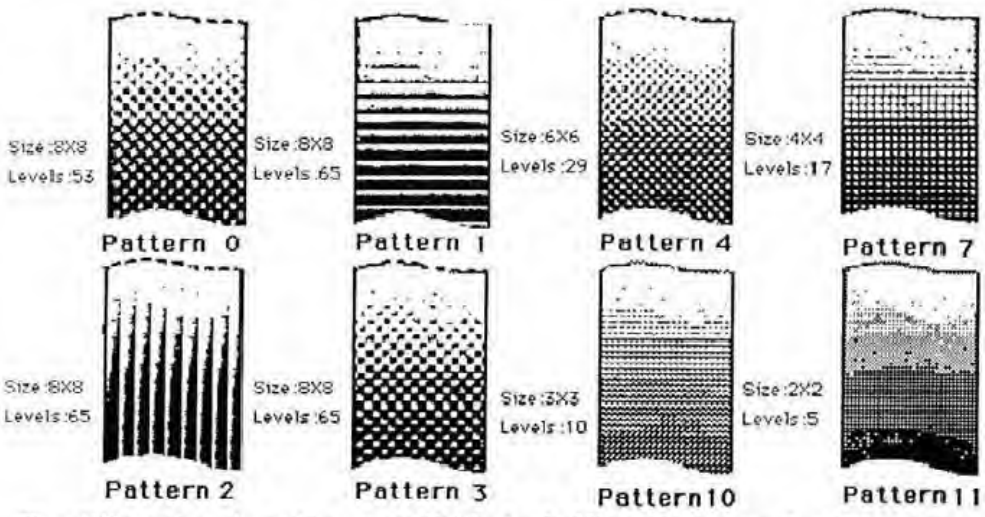


Editing the Image

Facilities are available within VersaScan Plus to use a few MacPaint-like tools to edit the scanned image, or to make choices from the Font, Size, Style, Fill and Border menus to enhance your scan with lines, fill patterns or text.

The Tools Window displays a set of easily recognisable drawing and editing tools, two of which have yet to be implemented in the version of software which I used. If a scan has been done at 72 dpi, then I feel it is preferable to save it as a MacPaint file, which is one of the Save options, and do the editing from within a drawing program such as MacPaint or Super Paint. One of the improvements which I think could be made to the software concerns the saving of a scanned image to a MacPaint file. Unless you have been very judicious in your choice of scan area, you will find that you have too large an image to fit in a MacPaint document. This means that the bottom or right hand side of your image may be cropped. It would be very much better if you could be shown the size of image it was possible to save as a Macpaint file and then be able to select which portion of your picture you save and which is cropped. However, a little experience goes a long way, and I soon became quite good at scanning a suitable size and getting the bit I wanted into the MacPaint document.

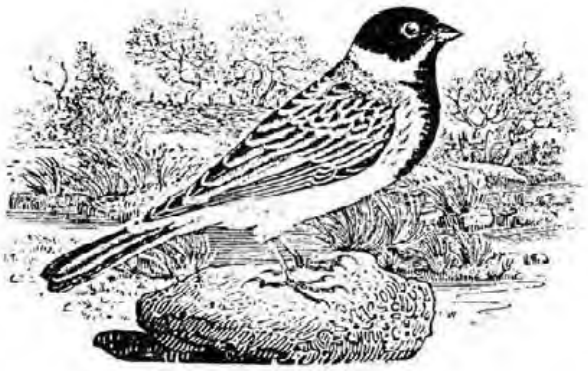
If you have scanned a large image at 300 dpi then it is easy to do a certain amount of editing using the VersaScan Plus tools. I used the cropping tool (marquee) to clean up and get rid of the parts of the image I did not wish to retain and then added text where necessary. The eraser was also used quite a lot. I occasionally used the Fat Bits option from the View menu to edit a few dots here and there, but some of the very large scan files can be rather unwieldy to edit in this manner, and I would imagine that to do any amount of editing without a hard disk would be time consuming.



The different grain patterns available for halftone scans on the Taxan 300.

Save Options

The Versa Scan Plus software seems to be developing rapidly at this time. Several of the Save Options have been implemented during the time I have been using the software. If 'Save As' in the File Menu is selected then a dialog box appears which gives you six options as to the type of file to save. In each case a default suffix is suggested and placed in the text



edit area. When the button next to 'VersaScan' is clicked the file may be saved with the ending '.PM' to remind you that this file may be reloaded into VersaScan Plus for further editing, or placed into PageMaker version 1.2. When 'TIFF' is selected, this file may be used by programs supporting the TIFF format, in particular PageMaker version 2.0, and may also be reloaded into VersaScan.

The next format available to 'Save As' is as a MacPaint file. Obviously, once this format is chosen the file may not be reloaded into VersaScan, but can be used in the many programs which support MacPaint documents. The next option is to save the file as a straight PostScript file which may be sent to PostScript devices by using a program such as 'Send PS'. It is not necessary to save in PS format to print to the LaserWriter as the file in memory will print straight out using the Print option in the File Menu, but it is good to be able to study the PostScript file where necessary. Two other formats support high resolution PostScript compatible machines such as the Allied Linotronic L100, L300.

Baud Rate

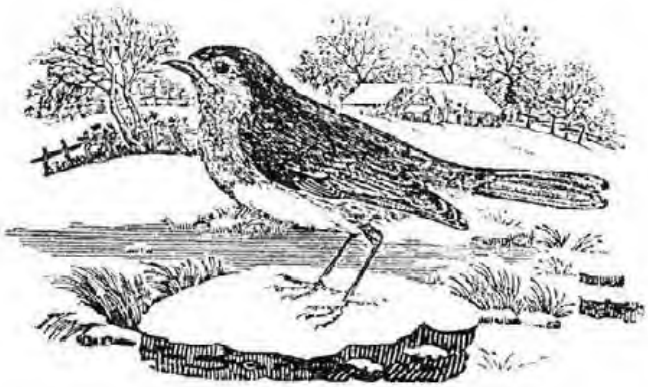
The TX-300 scanner that I have been using has been connected to the Macintosh Plus via the modem port. With the two machines connected in this way the scan data is transfered to the Macintosh at 57,600 baud (or bits per second). This seemed quite fast to me after using a ThunderScan but I understand that the TX-300 is capable of much faster speeds. While the Scanner is connected through the modem port it is limited to 57,600 baud by using RS422, however, a SCSI Adaptor is available from Taxan for connecting the scanner to the Macintosh via the SCSI port.

The SCSI connection will allow the scanner to transmit data at speeds in excess of 200,000 baud, meaning that an A4 page may be scanned at 300 dpi in approximately 15 seconds.

Illustrations

The illustrations in this article were all produced on the TX-300 scanner. They were all scanned using

the default settings of 0% Brightness, 0% Contrast and the default scaling of 100% for the 300 dpi scans, and 400% for the 72 dpi scans. After some thought, I deliberately chose to use the default settings. If you are prepared to fiddle around endlessly and spend a great deal of time then you



could get a fair result from a poor scanner by adjusting the settings until you got a satisfactory image. I think that it is important to show the results that can be produced by this scanner without any adjustments or messing about.

Face from a Mediaeval Letter

Conclusion

At a retail price of £1199, this scanner seems to be a good buy for those interested in extending their hardware in this direction. It is very easy to use and the saved files are able to be used with the major desk-top publishing packages. This article was created using PageMaker 2.0 and the scanner TIFF files loaded in without the slightest trouble.

The software, VersaScan Plus, has been developing rapidly and the programmers seem to be listening to users comments and are prepared to modify the code to accomodate new features where necessary.

Taxan appear to have a good product here, - I'm only hoping they don't ask for it back before my Christmas holiday!

info

Product : TX-300 Scanner
More Information from :
Taxan House
Cookham Road
Bracknell
Berks RG12 1RB
Price : £ 1199

Value : ★★★★★
Performance : ★★★★★
Documentation : ★★★★

Details of the Scans

1st Page:-
Marilyn was scanned from a picture of a page of a newspaper. The scan was a halftone using grain pattern 4.
Resolution:- 300dpi (LW)
Scale 100%
Brightness 0%
Contrast 0%
Reduction on printing:-None
The Golden Crested Wren came from a book of woodcuts by Thomas Bewick and his school. The picture scanned was rather feint. The scan was in line art mode.
Resolution:- 300dpi (LW)
Scale 100%
Brightness 0%
Contrast 0%
Reduction on printing:-None

2nd Page:-
Both the racing car and the biker were from black and white drawings on good quality paper. They were scanned as line art.
Resolution:- 300dpi (LW)
Scale 100%
Brightness 0%
Contrast 0%
Reduction on printing:-None

3rd Page:-
The Botticelli lady (made famous by a certain Macintosh software house) was scanned from a coloured print. It was scanned in halftone mode using grain pattern 4.
Resolution:- 300dpi (LW)
Scale 100%
Brightness 0%
Contrast 0%
Reduction on printing:-None

4th Page:-
The birds were more woodcuts and the originals were not good quality. Scan details as for the Golden Crested Wren above.
The medieval illuminated letter O was a black and white print on good quality paper. It originally almost filled an A4 page. The scan was done as line art.
Resolution:- 300dpi (LW)
Scale 100%
Brightness 0%
Contrast 0%
Reduction on printing:-50%

5th Page:-
The top illustration was scanned as line art, but this time at ImageWriter resolution of 72 dpi.
If printed on the ImageWriter it would fill an A4 page.
Resolution:- 72dpi (IW)
Scale 400%
Brightness 0%
Contrast 0%
Reduction on printing:-25%
The small head was scanned as line art and all the details and fill patterns added by editing within VersaScan Plus. Resolution:- 300dpi (LW)
Scale 100%
Brightness 0%
Contrast 0%
Reduction on printing:-None

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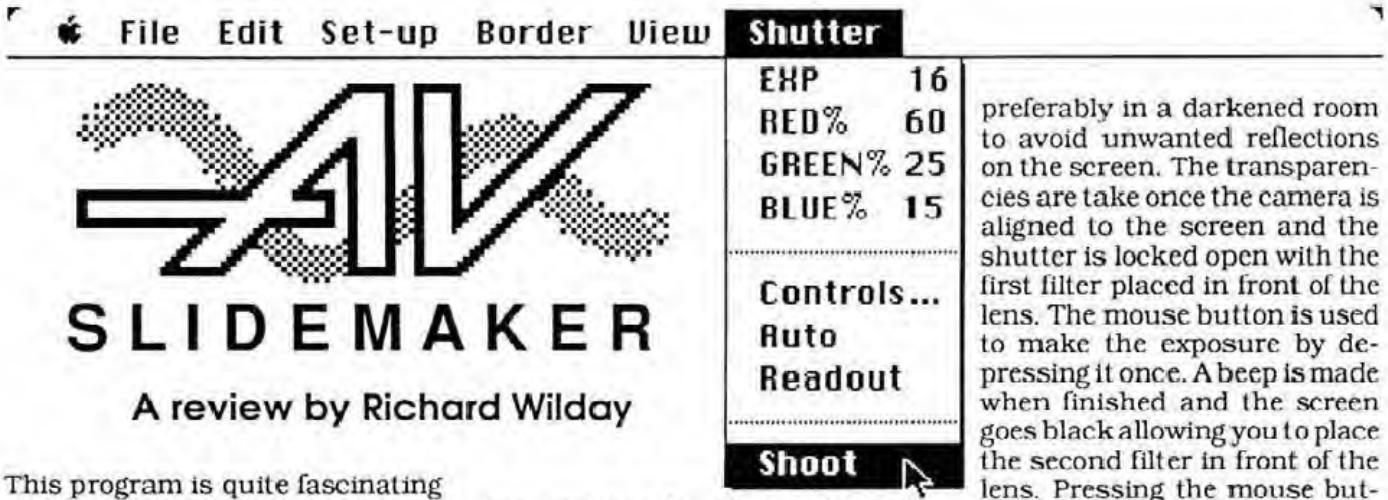
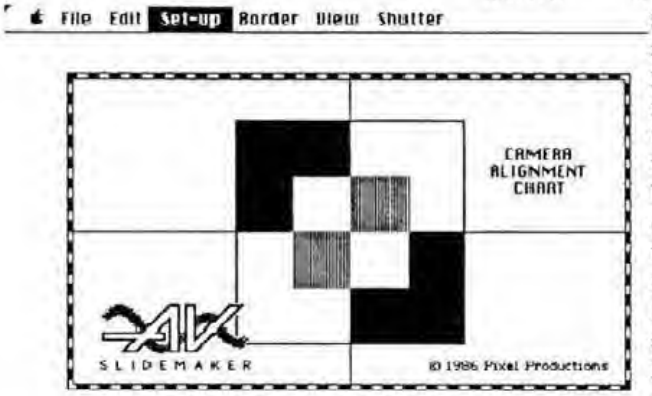


SLIDEMAKER

A review by Richard Wilday

This program is quite fascinating in that it enables you to produce very acceptable 35mm colour transparencies from your Macintosh. The only additional piece of equipment you need is the 35mm camera to take the finished slide. This must be of the single lens reflex type with the ability to lock the shutter in the open 'B' setting and capable of focusing on the complete Macintosh screen, but more of this later.

The package consists of a well laid out and readable manual with plenty of illustrations in a A5 ring binder. Within this binder is also the program disc, six example 35mm mounted colour slides and three colour separation filters.



The program uses the same techniques the professional Audio Visual people use. The only difference being that a higher resolution black and white monitor would be used, but the Macintosh screen produces surprisingly good results. The principle used is that of colour separation (i.e. the image you want to appear on the transparency is split into three separate images each corresponding to the picture for that particular colour). These images are displayed automatically by the program and you place the appropriate colour filter in front of the camera lens for that exposure. By varying the proportionate exposures of these primary filters Red, Green and Blue, virtually any colour can be produced. For example to achieve a yellow colour, equal exposures of Red and Green are given. For Cyan, equal exposures of Green and Blue and White is achieved by equal amounts of all three filters. You are told in the manual that the normal Macintosh screen has a blue bias, so to compensate for this, less exposure is given to this filter. In fact all Macintosh screens tend to vary in their colour balance and intensity especially as they get older. To establish the correct balance for the one you are going to use, the only way short of using a colour exposure meter, is to do a series of test slides. To help you determine this a 'TEST' Macpaint picture is used with the default settings and a series of varying exposures. Unfortunately you will have to have this film processed before you can be sure of achieving the desired results. The exposures should be made on a medium to slow film speed as longer exposures will give more accurate results. They should be made preferably in a darkened room to avoid unwanted reflections on the screen. The transparencies are take once the camera is aligned to the screen and the shutter is locked open with the first filter placed in front of the lens. The mouse button is used to make the exposure by depressing it once. A beep is made when finished and the screen goes black allowing you to place the second filter in front of the lens. Pressing the mouse button again automatically substitutes the second separation with the set balance. You then repeat for the third filter and then close the shutter.

There is a very good section in the manual together with tips on how to prepare your artwork and produce the three separations needed. Artwork from any source can be used but the final form must be in a Macpaint type format. These separations are loaded into the program from the Slidemaker's scrapbook. This can then be saved as its own file complete with settings for the exposure, colour balance and border. There are some very useful examples already on the disc which give further insights and help in showing how your separations should look!

As a photographer I have found the program not only very easy to use but an invaluable tool and very reasonably priced. There is also for those who have any problems or queries a Voice Telephone line or Bulletin Board number in the back of the Manual.

A very commendable and worthwhile British product.

What is MIDI?

Norah Arnold asks: Who needs MIDI? What is it? Why is it important?

Who needs MIDI?

Many musicians now use sophisticated electronic equipment to help them produce their music. What began with the use of synthesisers and drum machines has now escalated to include sequencers and CPU's.

Problems started when it became necessary for drum machines and sequencers to be able to communicate with each other in order to keep in time. If one of the two did not have control then synchronization between the drums and keyboards was lost.

The immediate solution to this problem was to connect the drum machine and the sequencer by a single synchronizing signal line, so that, for example, a pulse sent by the drum machine caused the sequencer to play a note so that the two machines kept perfect time.

As the electronic equipment used by musicians became ever more complex, manufacturers had the good sense to confer with each other and attempt to define a common standard to be used when interfacing musical equipment. The result of the deliberations was that in April 1983 the manufacturers announced the Musical Instrument Digital Interface, or MIDI as it is known to most of us.

What is MIDI?

A very broad range of needs can be catered for by the MIDI specification. Although it is similar to RS-232 it is not compatible and the rate of data transfer is much higher. Although only one wire is used for transmitting, MIDI can cater for up to sixteen separate channels. This means that one device may control many others independently.

On an electronic keyboard the MIDI connectors are 180 degree female 5-pin DIN sockets. Most keyboards will have one labelled 'MIDI IN' and one labelled 'MIDI OUT'. Sometimes a third may be found labelled 'MIDI THRU' which provides a direct copy of the data which has come in the 'MIDI IN' socket.

The connecting lead is shielded throughout, and pin 2 of the 5-pin DIN is connected to the shield and earth. Pins 1 and 3 are not used. Pins 4 and 5 are used as the current loop transmit lines. This means that the MIDI connector is used for one way only data transfer, unlike the RS-232 interface where transmit and receive are managed within one connector. However, the one way nature of MIDI simplifies the connections between the musical hardware, even though it may mean rather more cables lying around the place.

The maximum baud rate for RS-232 is 19200 but in practice this is not often achieved. Even 19200 is far too slow for the data transfer between musical instruments. Transmission parameters are fixed for MIDI at a baud rate of 31250, plus or minus 1%. Asynchronous data transfer is used for the MIDI interface, fixed at one start bit, eight data bits, and one stop bit. A 'word length' of three bytes is used.

Two types or categories of command are carried by the MIDI interface. Firstly, there are channel commands. These are used to tell a certain instrument what to play and when to play it. As stated previously, the MIDI interface can cope with sixteen channels, which means that the master device can control up to sixteen instruments independently of one another.

System commands are the second category of command, and there are three types of system command. System Common commands go to all the devices connected together in a network. System Real Time commands are also intended for all the devices in the network, but as their name suggests, they are generally used for synchronizing the whole system. System Exclusive commands are used to send commands to a particular manufacturer's machine. Obviously there is a great deal more to MIDI than I have described here and those interested in getting very technical can no doubt delve into technical manuals to find out what they want to know.

Why is MIDI important?

The decision by musical hardware manufacturers to abide by a standard interface, ie. MIDI, was very important because of the range of possibilities which have now become apparent. The moment one connects a computer into the network of instruments whole new fields open up. Commercial software, such as Opcode's MIDIMAC™ Sequencer offers the musician a sequencer with a capacity of many thousands of notes across many channels. Other software lets the musician actually compose on the computer with the score on the screen and the facility to print the composition when completed.

Manufacturers also win out because they can design their electronic musical instruments just as they wish, safe in the knowledge that as long as they supply the requisite MIDI sockets, their products can be linked with those from other manufacturers, leaving the musician free to buy the instrument of his choice.

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C.A.T.

Irene Flaxman reviews a relational database for managing your time

What is C.A.T.? It is a relational database, designed to help you to manage your Contacts, Activities and Time.

What is a relational database? It is, in fact, a set of databases containing different types of information, but the separate databases are linked to each other, so that related information can be accessed from the different sources. In the case of C.A.T., four separate databases are maintained:-

Contact records
Account records
Activiy records
Event records

All contacts are linked to an account, and all events are linked to a contact, activity and time.

The manual starts off with instructions on how to copy the program (which is unprotected). This allows you to work with the backup and to avoid the risk of damaging your master copy. Basic 'housekeeping' instructions are given, along with details of the 'bare essentials' necessary to run the program.

You then have the option of working through a detailed tutorial which will teach you how to use the basic features of the program, and give you some more advanced techniques for making your time-management more effective. Further sections of the manual then cover all the essential topics in greater detail.

The online help facility is available at all times, and will display information which is related to the window which is active at the time of selecting 'help'. This is a useful facility, which means that you do not need to keep the manual constantly at your side.

Account records include details of companies or other organisations, but do not show details of individual contacts. A contact record is used to record the name, telephone number, etc. of each individual contact - and this record will be linked to one of the account records. If an account record is selected before opening a new contact record, the account details will be carried over automatically - otherwise, just type in the account name or use the search facility. Both databases are sorted alphabetically when viewed on screen, the contact database being displayed as surname then first name (e.g. Smith, John); however, you don't have to enter the name in this way (which always seems rather impersonal to me), an entry of 'John Smith' will be coped with quite happily, and correctly filed. On most screens, a 'Notes' field is also available, which allows you to enter up to 16 pages of scrollable text. Accounts can be organised logically into up to 14 'Views', to make location of an individual record easier. Accounts may be included in several different views, or you may view all accounts or just those added during the current session (i.e. since the data was last saved). Additionally, you have the option of using up to eight account classification tables and up to four contact classification tables, to help you organise the information held in your databases.

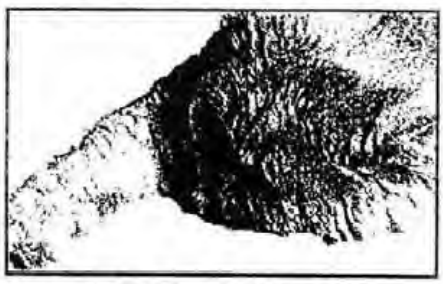
Activity records can be used to keep track of anything that you wish. Records are organised into six 'Activity Classes', which have been allocated standard names such as 'letters', 'orders', etc., but these names can be altered to reflect your own filing requirements. Other useful feautres of this part of the program are the 'Preset Letters', which will tailor a standard letter to an individual recipient; and 'Preset Tactics', which allows you to set a reminder for future action, or to work out charges, etc.

These activities are the keys to organising your time. Having entered details of all your proposed activities, you may check out your 'To Do' list at any time, selecting on various criteria - such as specific times, contacts, or types of activity. The use of italic and plain typefaces is used to differentiate between completed activities and those still to be done, but you can also choose to view just those activities yet to be completed.

Printing options are numerous and somewhat confusing initially. Several standard reports are provided, or you can tailor your own reports. As usual, the default page size is US Letter, but this can easily be changed to A4. Printing to both the ImageWriter II and the LaserWriter are supported, but I found that I frequently suffered system crashes when trying to print out reports (using either printer), if I were working from my hard disk - I think it was a problem with my system/finder/printer driver. In some cases, the report was printed before the crash, but in other cases I could not print out at all.

I have to admit that I was a little irritated by the Americanisms - such as the US date format, the use of dollar rates for any costings, the provisions for state and zip codes in addresses. None of these precludes the use of the program, but they do demonstrate the fact that this is an American import.

The program is essentially an electronic version of the Time Manager/Filofax planning aids. As such, it is useful if you are disciplined enough to use it. If you are not that disciplined, it will not do anything for you. I was converted to using a Time Manager some years ago, so I have learnt to appreciate the value of such a system, and should find this a very useful tool.



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Mac Music

Norah Arnold pays a visit to Argent's where the Mac makes music.

The outside of Rod Argent's Keyboards in Denmark Street, WC2, is not very inspiring, yet I have hardly ever seen the shop empty when I have passed by on a Saturday morning. It seems to be for ever populated with young men discussing the relative merits of the electronic hardware and occasionally getting so carried away that they are in danger of doing serious damage to the eardrums of those around them. Yet it is in this environment that the Macintosh has taken on yet another role, as a tool for musicians.

The Macintosh, with its short learning curve and accessible graphics, has opened up the world of music to the possibility that 'music processing' will soon be as common as 'word processing'. The laborious creation of musical scores by hand will surely give way to computer typesetting of music, and the role of the computer in controlling the input of musical data through a MIDI interface is here to stay.

At Argent's, the young man who has become very involved with the Macintosh's role in music is Lindsay Bridgwater. A few months ago I watched him demonstrate the capabilities of Performer™, Mark of the Unicorn's powerful 200 track real and step-time sequencer. Lindsay listed three advantages that he saw in the digital recording of sound over tape recording. The first advantage was that it gave greater precision. Secondly, the quality does not deteriorate over time. The third advantage was that it saved studio time with instrumentalists.

On my most recent visit to Argent's one Saturday morning, Lindsay was nowhere to be seen. Chris Sherwin explained that Lindsay was out demonstrating the musical capabilities of the Macintosh to some disabled younsters.

At least a 512K Macintosh is needed to run Performer. Like other sequencers, Performer enables the recording and playback of music performed on a synthesizer, sound sampler or other MIDI compatible device. Performer also has the ability to convert data derived from performance into conventional music notation using Mark of the Unicorn's other program, Professional Composer. If Performer and Professional Composer are run together under Switcher or Multifinder they make a very powerful combination. Argent's sell Performer version 2.2 for £399 and Professional Composer version 2.1 for £448.50.

Version 2.1 of Professional Composer now supports use of Adobe Music System's 'Sonata' font. Sonata is not a bit-mapped font but is a PostScript font of musical symbols defined as vectors and bezier curves. This gives the user control over font size and enables the use of PostScript printers such as the Apple LaserWriter (300 dots per inch) and other more expensive phototypesetters giving a resolution of 1270 dots per inch or more.

Just as Performer and Professional Composer make a very strong combination, other music packages sold by Argent's can be used in conjunction with each other. Opcode's MIDIMAC™ Sequencer 2.5 has no built-in notation features, however it has options which allow the user to save files in several different formats. Files from Sequencer 2.5 may be transfered to Opcode's Deluxe Music Construction Set (DMCS) which will support the use of the Adobe 'Sonata' font on the Apple LaserWriter. DMCS provides triplets, quintuplets, slurs, ties, adjustable beams, octave signs, repeats, braces, brackets and 1st and 2nd endings. Up to eight staves may be created with two rhythmically independent tracks per stave, with treble, alto, tenor and bass clefs.

Also sold by Argent's are Opcode's Editor/Librarians, which have become the standard in voicing software for the Yamaha DX7 and the Casio CZ. All the Editor/Librarians combine the Opcode Patch Librarian with a Patch Editor which graphically displays all the parameters of an instrument's sound on the Macintosh screen at the same time. Every change which is made on the screen is sent instantly to the synthesizer. The Patch Librarian allows the storage of a large number of synthesizer patches on disk. The Librarians also feature Patch Factory™ random patch generation.

If you are into making music on the Macintosh, visit Argent's and find out what is available.

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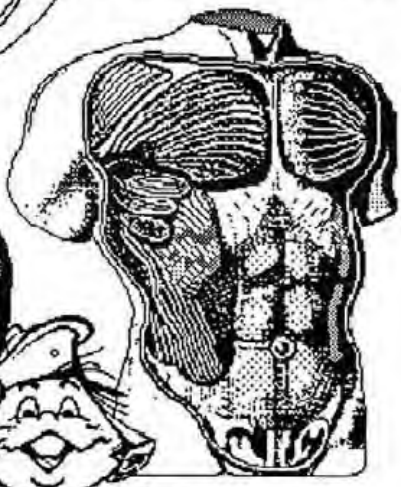

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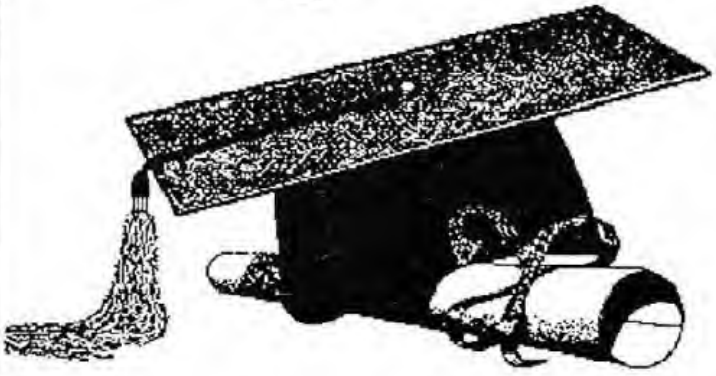

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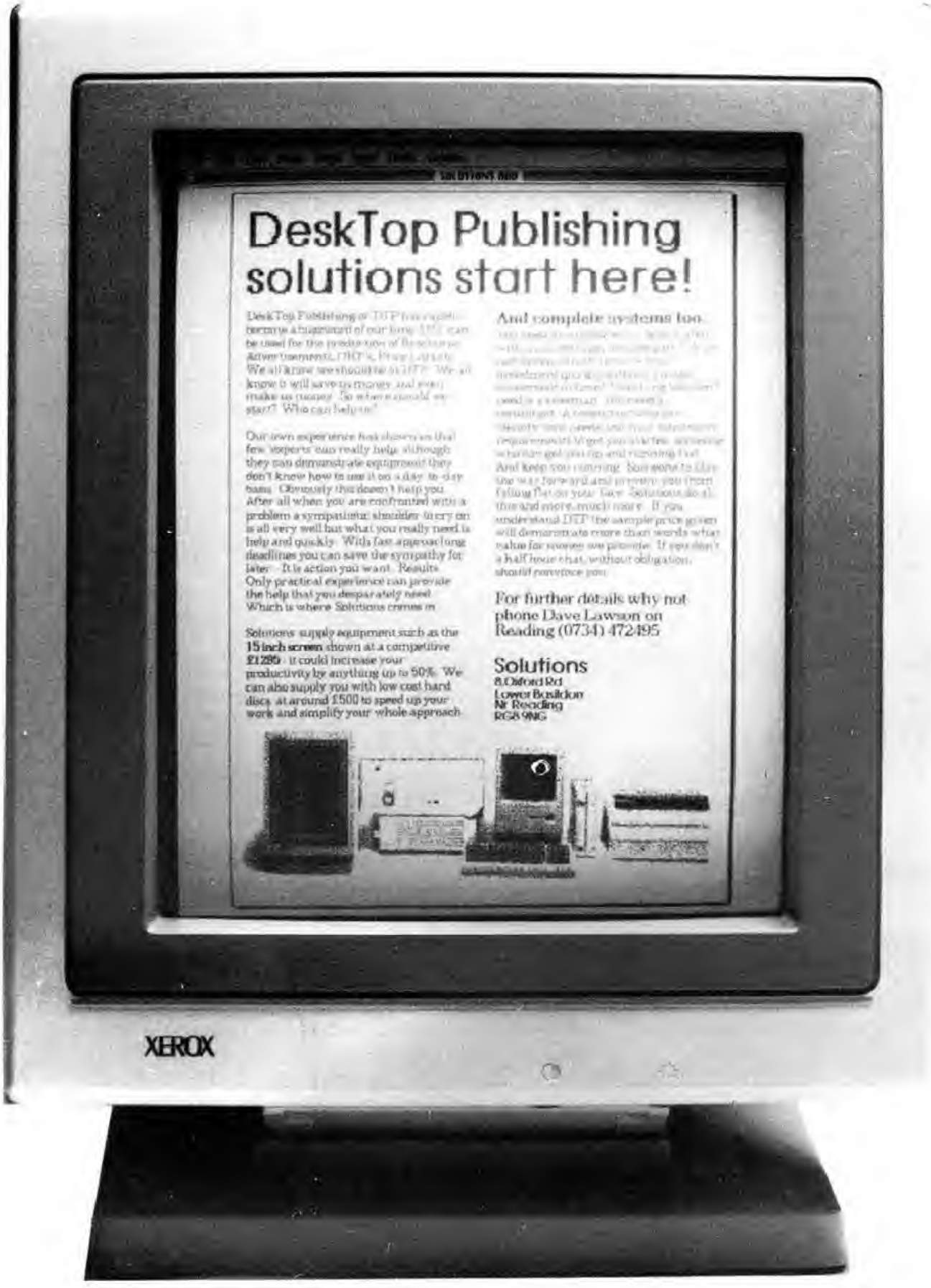
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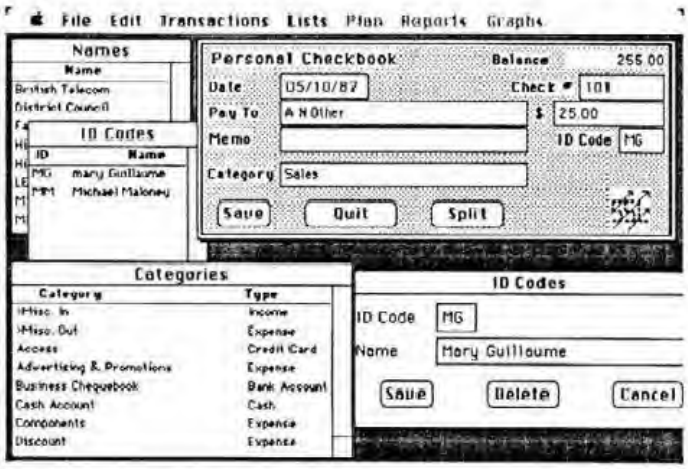
MacMoney

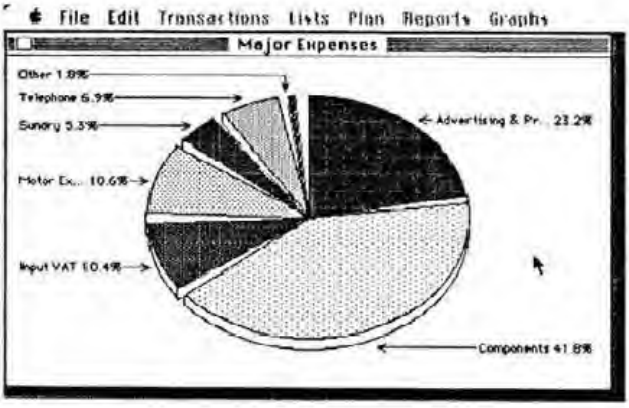
Mary E Guillaume and Michael S Maloney keep the money in check with this value for money application.

MacMoney is a program for keeping financial records on the Macintosh. It includes a few nifty financial planning facilities such as calculating loan repayments.

MacMoney comes stored on two 400K floppy discs with the almost obligatory system, program split. The system disc on the review copy included System 3.2, Finder 5.3 and Printer Drivers for the Imagewriter and Laserwriter.

Opening the program disc brings up two icons - a 247K application MacMoney (V2.02b) and a 31K Help File. This copious Help File is one of the good features of a package in which, generally, being informative but one can't help missing all those pictures of yuppies with a vase of flowers on their desks. The program runs on 512K and Plus Macs and if Apple 2000 want to donate a Mac II we'd be happy to check it on a more advanced machine too.





good outweighs bad by a fair margin. At almost any point in the proceedings a Command-H brings up a comprehensive scrolling list of topics for which help information is available. The help screens are concise and, well, helpful often saving having to refer to the manual.

The manual is a fine but worthy example of the art. No slick MacWrite-like manual this, its 158 pages are, as the Weetabix people say 'packed with goodness'. Perhaps a program about something as serious as money is considered not to need a manual that is a pleasure to read as well as

MacMoney is of course a database type program and in common with all databases it suffers from one overriding problem; database programs as a species are at their hardest to use when new, simply because until the data is entered, and that means that the formats to which the data are to be entered have themselves been dreamt up, databases cannot do anything. The usual way to become familiar with any program is to use it, but with databases a more or less thorough understanding of the program must precede use. For a newcomer therefore the most important question is - How easy is the program to get into? MacMoney of course has the Macintosh interface as a major ally, and this is faithfully adhered to. Some transatlantic niggles do linger, such as '$' instead of '£' on the data entry forms and 'checks' instead of 'cheques', but in general no real problems occur here. The program accepts calendar data in DD/MM/YY format, which is a relief. The other plus point to aid swift understanding is that all the data entry forms and the report forms are predesigned. Unfortunately reports will only print on 'US Letter' or 'Computer Paper' paper sizes - a dialogue box asks you to choose again if you try to use up any of those sheets of A4 paper your printer is loaded with.

Setting up the database is relatively painless; the program asks for a name and then creates all the files it needs to run, littering the desktop with nine icons in the process. The next step is to create your accounts, or 'Categories' as MacMoney calls them. Up to 200 'Categories' may be set up, each being designated as either Bank Account, Credit Card, Cash, Asset, Liability, Income or Expense. Opening Balances can be keyed in, except on Income or Expense types where the 'Adjustments' option must be used, and if you would like the account to have a budget just create one. Names, balances and types can be altered or the account deleted until transactions involving it occur. A list of up to 100 default 'Names' can also be created for regular customers or suppliers, together with a list of up to 50 'ID' codes for analysis purposes.

Data entry is via the transaction screens; you only need to enter the payee/source, amount (which can usefully be split between various categories) and category for the information to be posted to the correct account. A nice touch is that cheques etc. are automatically dated and numbered, and the balance on your account displayed at the top of the form (this may be a worry of course!). If you make regular

payments or direct debits these can be set up as 'Automatics' with due dates etc., MacMoney will then remind you each time you open it which payments are due. Up to 3,000 transactions may be accommodated on a 400K disc and 6,000 on an 800K or a hard disc.

Once you have some data to play with MacMoney will produce several useful reports covering an 'Income and Expense Statement', 'Personal Balance Sheet', 'This Month's Activity' and a 'Bill Payment Summary' (showing all automatic transactions and their status). It will also produce a variety of line, pie and bar graphs to show where the money went, with a useful option which plots a trendline on any graph. Custom reports and graphs are available at the click of a button or two. SSL, the publishers, make some play of the ability to transfer data from MacMoney to a variety of other favourite Macintosh programs, however such exporting is fraught with dificulties for users used to cutting, copying and pasting their way through a problem. Data can only be exported as text files or as screen dumps in the case of graphic data, indeed screen dumps to either the printer or a Macpaint compatible file is the only way to print the graphs.

In summary, for individuals interested in keeping track of their money in some detail MacMoney would be £48 well spent and good value compared to accountants fees. It would probably also be suitable for a small business provided some care is taken in setting up the accounts at the outset. As a genuine double-entry system, with good reporting facilities, MacMoney should certainly be acceptable to your accountants when it comes time for them to prepare your accounts.

MacMoney was loaned for review and is available from:
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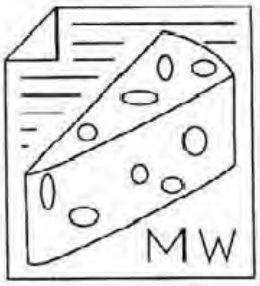
A Bi-Directional Hebrew/English Wordprocessor



reviewed by

Bernard S. Jackson

MouseWrite (previously "Achbar") is described as a "fully bilingual bidirectional word processor", designed for typing in both English (and other languages using the Roman alphabet - the usual range of Macintosh European accents, é, à, î, ü, ø, etc. is supported) and Hebrew (though presumably with the appropriate fonts it could be used to write other right-to-left scripts).

MouseWrite can be reviewed on two criteria: as a wordprocessor, and as a Hebrew wordprocessor. It is unlikely that anyone who does not need to use Hebrew will want to buy it (given its price). I shall therefore summarise its general wordprocessing features very briefly, and then expand upon the benefits and limitations of its Hebrew facilities.

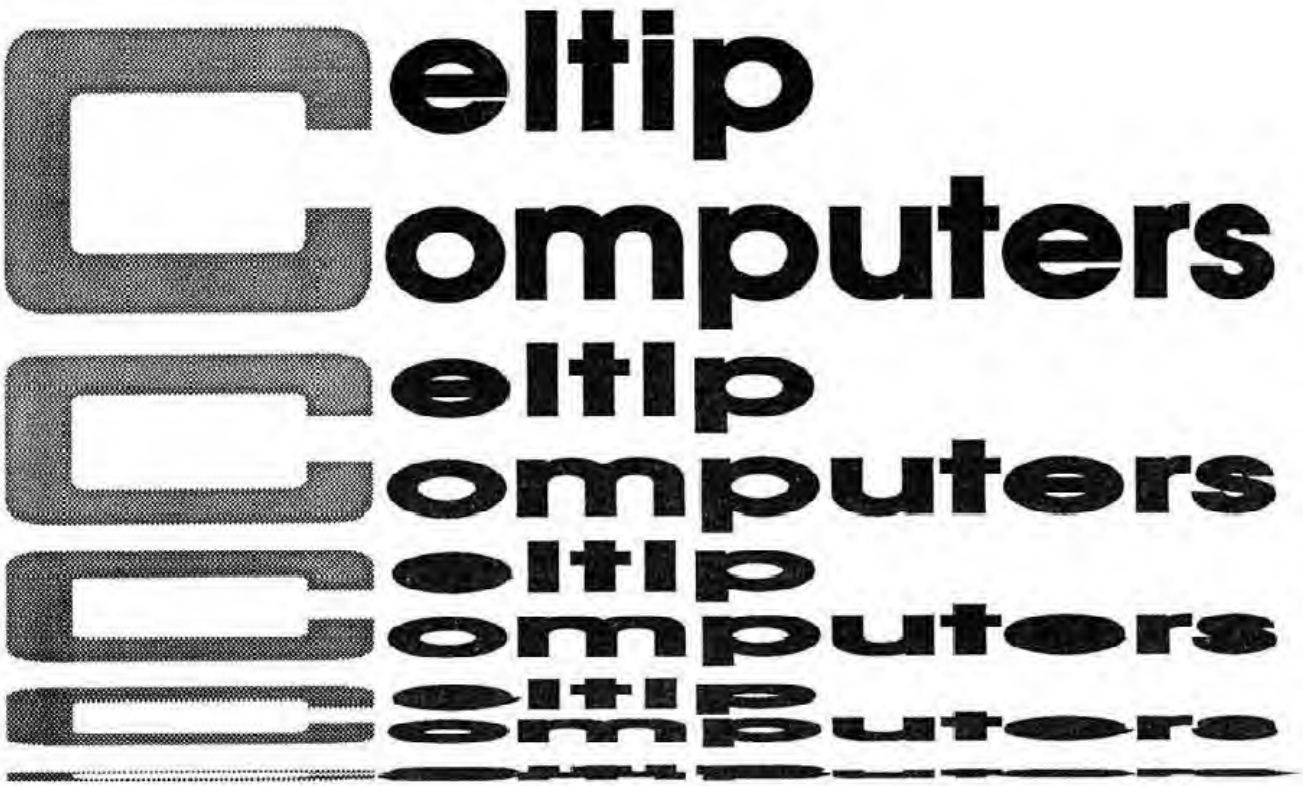
Functions are accessed via a menu bar and a ruler. They control left and right margins; tabs and indents; left, right, centered and fully-justified lines (though English cannot be right-only justified, nor Hebrew left-only); single, 1.5 and double line spacing. There is a facility for the creation of tables, with the text embedded in vertical and horizontal lines. Up to ten tabs can be defined in a single ruler, but a new ruler is needed for every change of paragraph format and line spacing. The manual seems to assume that users have relatively unsophisticated needs: "Occasionally you will like to define different rulers for different sections of your document." Since the exact position of the ruler is not visible in the text - nor any of the usual markers (tabs, para. signs, etc.) - the user has a feeling of less than complete control. I experienced quite a few crashes in trying to manipulate rulers - maybe beginner's inexperience with the program. There is automatic pagination, page numbering with choice of initial page number, headers and footers with page numbers and dates, find and change (in Hebrew as well as English), and mail merge. Only one document can be open at a time; hence cutting and pasting from one document to another is slightly more complex than in some other wordprocessors. Printing from the Finder supports the queueing of documents, but I was not able to test this. Graphics may be imported from other programs in the usual way, and to aid the export of MouseWrite documents, it is possible to save both defined pages of them as MacPaint documents and selected text (e.g. Hebrew) in PICT form. Because of the nature of the program, it will be difficult to edit satisfactorily any right-to-left sections in other wordprocessors.

The Ruler contains buttons for Hebrew and English, these controlling the "native direction" of the text controlled by that ruler. This paragraph is written with the English button depressed, so that the native direction is left to right. However, by selecting "Hebrew in English" from the Language menu, a passage of Hebrew can be inserted. Where just a single word, like הלכה, is involved, the program works without problems. But once two or more words are inserted - like מזל טוב - these two words follow the "native direction" (i.e. left to right) in wrap-around, so that the second word, טוב, might appear at the end of one line while the first, מזל, goes to the beginning of the next. (An illustration of this, with the native direction reversed, so that it is English inserted in Hebrew which gets distorted in wrap-around, is provided below.) Thus, though text can be entered bi-directionally, there can only be single-direction wrap-around in any given paragraph. This seems to explain why the illustrations in the manual contain only three-word Hebrew phrases in the centre of the line. In scholarly work, however, bi-directional wrap-around is frequently required.

In order to insert Hebrew text with right-to-left wrap-around into a document commenced in English (and English in one commenced in Hebrew) it is necessary to command the insertion of a new ruler, change the direction of the type and change the font. This change of fonts can be made automatic, by an appropriate selection in the "Auto Fonts" box. Thus:

ואלה המשפטים אשר תשים לפניהם. כי תקנה
עבד עברי שש שנים יעבד ובשבעת יצא
לחפשי.

I wondered whether new rulers could be inserted in the middle of a paragraph, so as to combine Hebrew with wrap around at the left with English with wrap-around at the right. Only this, in my view, would justify the claim of the program to be "fully ... bidirectional". Sadly, this hope was disappointed. The effect of inserting a new ruler in the middle of a paragraph is to create a new paragraph. Thus, MouseWrite can generate documents with paragraphs alternating between English and Hebrew, and can satisfactorily integrate individual words of the "foreign" language into a paragraph written in the "native" language, but beyond this the two languages cannot be satisfactorily integrated into a single paragraph - unless wrap-around is eliminated altogether by inserting a paragraph mark (= carriage return) at the end of



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each line, to this extent effectively converting the wordprocessor back into a typewriter. If we combine Hebrew and English in the same paragraph without a New Ruler, this is the effect (Paragraph started in Hebrew (which is correct), with "Push-On" to English):

ואלה המשפטים אשר תשים לפניהם. כי תקנה
עבד עברי שש שנים יעבד ובשבעת יצא
Hebrew text entered in 12 point then copied לחפשי.
Here we have

As a wordprocessor, MouseWrite is far more sophisticated than HaKotev™, reviewed in a previous issue. Both English and Hebrew text can be presented in a variety of styles and sizes. The following variations, for example, are impossible in HaKotev™ within the same document:

ואלה המשפטים אשר תשים לפניהם. כי
תקנה עבד עברי שש שנים יעבד
ובשבעת יצא לחפשי. (12 point plain)

ואלה המשפטים אשר
תשים לפניהם. כי תקנה
עבד עברי שש שנים
יעבד ובשבעת יצא
לחפשי. (18 pt)

ואלה המשפטים
אשר תשים לפניהם.
כי תקנה עבד עברי
שש שנים יעבד
ובשבעת יצא
לחפשי. (24 pt)

ואלה המשפטים אשר תשים
לפניהם. כי תקנה עבד עברי שש
שנים יעבד ובשבעת יצא לחפשי
(12 point bold)

ואלה המשפטים אשר תשים לפניהם. כי
תקנה עבד עברי שש שנים יעבד
ובשבעת יצא לחפש (12 point italic)

ואלה המשפטים אשר תשים
לפניהם. כי תקנה עבד
עברי שש שנים יעבד
ובשבעת יצא לחפשי (12 pt shadow)

Hebrew font manipulation is, indeed, the major strength of MouseWrite, especially from version 2.0. Colour printing in a range of white, red, green, blue, cyan, magenta, and yellow is supported. No doubt the program will come into its own with the Mac II. But even earlier Macs, which can drive colour printing on an Imagewriter, signify the presence of colour by on-screen (only) patterned underlining (the identity of the colour can be verified from the Color menu bar). To save having to define all the characteristics of a font each time it is used, names can be assigned to fonts in combination with particular characteristics, e.g. 12 point Tamar/bold/blue/extended; 9 point Maya/superscript/condensed. All occurrences of one set of font characteristics (Hebrew or English) are changeable with Auto Fonts to a different set, offering a facility not available in some powerful general wordprocessors. However, this bombed out each of the two times I tried it.

The version of MouseWrite which I tested falls behind HaKotev™ in one respect: it lacks Hebrew vowels (most of them printed as diacritical marks above, below or inside the letter). Compare with the present samples the "pointed" version of the same text in my review of HaKotev™ in Apple2000 June 1987, page 39. From documentation I have received from Linguists' Software, however, I understand that a version with vowels is available (at $225, as against $199 for the basic version). Even better, a version of Linguists' Software's own "SuperHebrew" (an earlier name, I think, for their "LaserHebrew") is claimed to have been developed "which works beautifully with Achbar (= MouseWrite), including automatic non-deleting backspacing for all the vowel points, accents, cantillation marks, and text critical symbols of the Biblia Hebraica." For a variety of reasons, Linguists' Software recommends the use of its own Hebrew fonts with the basic version of Achbar/MouseWrite, for pointed Hebrew, and it looks as if the laser printing of pointed Hebrew is just around the corner (if not already available) when the appropriate programs of Davka Corporation and Linguists' Software are used together.

At the end of the day, MouseWrite cannot be assessed in the abstract, but only in terms of the varying needs of different kinds of user. For those wanting to write documents entirely in Hebrew, or in Hebrew with only single words of English interspersed, it looks fine - effectively a Hebrew wordprocessor of approximately MacWrite standard. This is its optimum use - not surprisingly, perhaps, given that the program was developed in Israel. For those needing to write whole paragraphs of Hebrew inside English documents, it works, but the claims of the cheaper HaKotev™, for all its limitations, are worth considering, and the latter may be preferred if a more powerful English wordprocessor (e.g. with a spellcheck, outlining, or footnotes) is required. For those wanting to write in English with occasional individual words in Hebrew, MouseWrite is hardly worth the expense: a Hebrew font can be installed in any system or WP application, and for single words the effort of depressing the leftward cursor twice after every letter is, perhaps, not intolerable; moreover, a shareware desk accessory to allow such "backwards" entry of text will shortly become available.

For those needing to combine Hebrew and English phrases and sentences in the same paragraph, this seems to be beyond the current state of the art of Mac software - but I hope someone will prove me wrong. There are, at least in principle, a number of possible work-arounds - none of them elegant or easy. For short Hebrew phrases embedded in English paragraphs, use an ordinary English wordprocessor with a Hebrew font installed; enter the letters either backwards or reversing the cursor after each letter or by using Conrad Gempf's soon-to-be-released shareware desk accessory called "Palindrome" (write to him [until June '88] at 43 Glenmere Close, Cambridge, CB1 4EF); ensure that the spacing between each of the words of Hebrew is of the non-breaking variety; and (where using fully justified text) adjust the lines before and after to compensate for any large white space in the English so caused. For Hebrew insertions more than a single line's length, use the above method to complete in Hebrew the line where the English finishes; compose all complete lines using a Hebrew wordprocessor, and insert them in MacPaint or PICT form; and compose the line where the Hebrew ends and the English recommences in the same way as for the line where the Hebrew commenced.

In principle, it should be possible to do all this within MouseWrite itself, by putting a paragraph mark after the last complete line in one language and the line of 'mixed' text. But this is the nearest I could get - after multiple crashes in seeking to put the New Ruler in the right place.

ואלה המשפטים אשר תשים לפניהם. כי
תקנה עבד עברי שש שנים יעבד

Here we have a Hebrew text ובשבעת יצא לחפשי entered in 10 point with the third line read first from the right margin to complete the Hebrew sentence, then from the left to start the succeeding English sentence.

It seems that MouseWrite insists on a line of spacing before each New Ruler. Without that, the trick could be pulled, although the program would need to be rather more stable than this version to make it a practical proposition. It would surely be worthwhile for Davka Corp. to refine the program along these lines, and to provide clear instructions in the manual as to the procedure necessary to mix text in this way.

Editor's Notes :

MouseWrite is published by Davka Corporation, 845 North Michigan Avenue Suite 843, Chicago, Illinois 60611 USA..

This article was originally written in MouseWrite. The portions of Hebrew text were "copied as picture", and pasted to the scrapbook. The text was also transferred to MacWrite, so that it could be placed into PageMaker for formatting into columns. Finally, the "pictures" of the Hebrew portions were pasted from the scrapbook into the appropriate positions on the pages. **Irene Flaxman**

Hebrew CalendarMaker for the Macintosh

Davka Corporation have an extensive range of Judaic software for Apple II and Macintosh. CE Software's CalendarMaker has been adapted to produce a Hebrew calendar, which can contain the Hebrew dates for each month, the Torah Portion for each week, and the Jewish holidays for each month. The pakage includes 15 FullPaint pictures for use as calendar pictures, and 24 Judaic icons for marking individual dates. **Irene**

Mac Library

New Macintosh Library Catalogue

Just in time for the MacUser Show, the new Macintosh Library Catalogue was completed, giving details of all the re-organised disks. There were times when I thought that the job would never be completed. Sorting the large number of files in the Macintosh Software Library was no joke.

All the members of Apple2000 who own Macintosh machines should now have received a copy of the new software catalogue with this magazine.

If you own a Macintosh but have not received a copy of the new software catalogue, then the most likely reason is that you have never informed us that you own one. Write or phone and let us know if this applies to you, and we will send you a copy of the catalogue.

The Membership Secretary often receives application forms from new members who have neglected to fill in the part which asks which machine they own.

The catalogue has been printed with wide margins at the centre and punched so that members may file the pages for future reference. The disks have been organised into several categories, which are as follows:-

Desk Accessories
Fonts
LaserWriter Fonts, PostScript, etc.
Medical
Communications
Business
Spreadsheets
FileVision
HyperStacks
Mac II
Demo Disks
Education
Utilities
Programming
Games
Sound
Graphics
BASIC
General Interest

As new material comes in, disks may be issued as Updates and then every six months or so they will be incorporated into the appropriate category of the library. When this happens we will issue new pages to be added to your catalogue file.

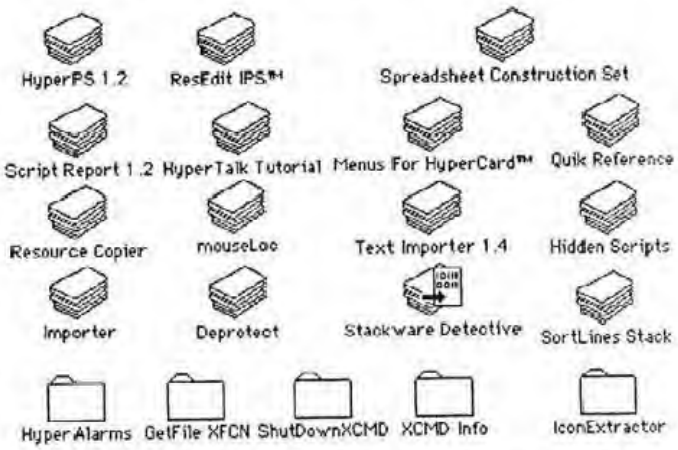
In order to give a better service to members, the new library disks are all 800K. This means that you will need access to an 800K disk drive in order to use them. By making them 800K we are giving out more software for the same price and postage.

However, we have not forgotten that some owners have 400K drives only. If you are one of them, then you can still buy software from the library, but when you order you must specify 400K disks. This means that any disk that you order will be sent to you on two 400K disks, and because you are receiving two disks instead of one, you will be charged a little more to cover the cost incurred by the extra disk and higher postage.

New Disks for December

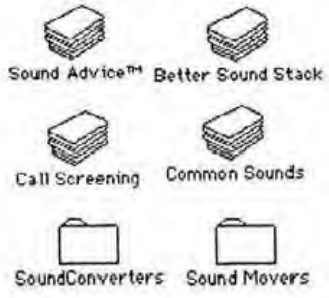
Since the catalogue was compiled, ten disks of Hypercard Stacks have been added to the Library. You do need to own HyperCard in order to use the files on these disks. As stacks may be customised to make them fit your own designs and needs, having a look at those created by other people can be very helpful. The following is a brief description of the contents of the new disks.

Disk 064 HyperStacks 4



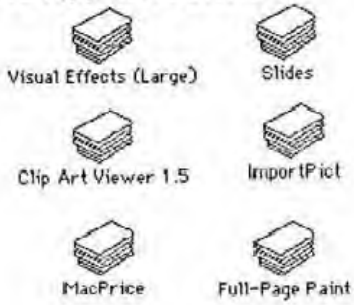
HyperTalk Tutorial:- an interactive guide to programming HyperCard.
ResEdit IPS:- assists in the use of the ResEdit utility.
HyperPS:- an example of how to get 300 dpi quality from HyperCard reports.
HiddenScripts:-Gives instructions on examining stacks whose scripts are hidden from view.
Importer:- a shareware program which reads any tab-delimited file into a new stack, and creates a new card for each record.
Menus:- helps you create your own pull-down menus for HyperCard stacks.

Disk 065 HyperStacks 5



Better Sound Stack:- gives an example interface for sound and synchronized on-screen actions that are controlled by a play-list card.
Common Sounds:- 10 sounds to use in stacks.
Sound Converters:- 4 sound conversion utilities.
Sound Mover:- works like Font/DA Mover (Shareware).

Disk 066 HyperStacks 6



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MACINTOSH PUBLICATION

The Complete HyperCard Handbook £27.95

Danny Goodman knows that HyperCard is such a new, rich, and open-ended information environment that you need a hands-on, in-depth guide to appreciate all its powers, and this book is it! The Complete Hypercard Handbook is the culmination of many months of working closely with HyperCard and it's designer, Bill Atkinson.

The first half reveals every shortcut and undocumented feature Goodman knows for HyperCard browsing, graphics and authoring. The second half gently leads you into HyperCard's comprehensive programming level and the HyperTalk language. You also get step-by-step explanations of several fully-featured, HyperTalk-intensive applications.

HyperCard is a four-dimensional blank slate: height and width of a card, the depth of a stack and the power of your imagination. The Complete Hypercard Handbook shows you how to master the first three dimensions and how to unlock the fourth to build your Macintosh world around HyperCard.

APPLE PUBLICATION

AppleWorks Made Easy (Includes Version 2.0) £15.95

Because Apple's integrated software, which combines database, spreadsheet, and word processing capabilities, now runs on the Apple IIGS, the Apple II, IIc, and IIe, this top-selling title has been revised and expanded to cover the new AppleWorks version 2.0, as well as the original version.

Whether you're a first-time user or an experienced one, AppleWorks Made Easy offers you outstanding business solutions that you can apply directly to your work. Numerous examples and exercises help you take full control of all three AppleWorks components so you can use them separately or integrate them for greater power. With this "hands-on" approach you'll quickly master all the new AppleWorks features, including the Mail Merge capability.

An excellent teaching guide, AppleWorks Made Easy is designed to make the time you spend "Apple-Working" more efficient and profitable.

APPLE IIGS PUBLICATIONS

Apple IIGS Firmware Reference £22.95

Now programmers and designers have a comprehensive guide to the inner workings of the popular Apple IIGS computer and, as the Apple IIGS user base grows, more and more programmers need the important technical information found only in this manual.

The manual begins with an overview of IIGS firmware. Then, in detail, it tells how to use the firmware to access the system's monitor, mini-assember, disassembler, keyboard, mouse, video display, serial ports and disk drives.

Detailed appendixes contain summary tables and information about the firmware, and tell how a user can include firmware calls within programs, thereby allowing the user to really have control over the most authoritative and comprehensive information available on this amazingly versatile computer.

The Apple IIGS Firmware Reference is Apple's definitive guide for assembly-language programmers and hardware developers working with the Apple IIGS. In a single volume, it provides an extensive description of the internal operations of the machine and presents the latest information about the firmware facilities that the IIGS provides.

Inside the Apple IIGS £19.95

Whether you're a hacker, a hobbyist, or a professional programmer, and you want direct access to the system resources and functions of this machine, this book is a must. Inside the Apple IIGS is the insider's guide for programmers that opens up the latest and most advanced computer in the Apple II family with technical information and explicit techniques you won't find anywhere else.

Programming examples throughout the book show how to use the system's ROM calls, soft switches, and tool calls using 65C816 assembly language. The author looks at every aspect of the hardware and system organisation, including banked memory, the battery RAM, serial ports, game controllers, disk I/O, the new Monitor and ROM calls and, of course, extensive treatment of the GS's new tool sets, sound, and graphics facilities.

The book's ten appendices offer extensive technical reference material, including a summary of the 65C816 instruction set, colour values, character sets, and much more.

Apple IIGS Technical Reference £17.95

Open the Apple IIGS Technical Reference and look inside Apple's fabulous computer! Every detail of IIGS architecture is thoroughly explained by the author.

Now you can write software that runs in IIGS 8-, 16-, and 32-bit operating modes - all are clearly described. With Michael Fischer's insight on software and firmware, you'll get maximum performance from IIGS hardware through the:

- ROM operating system
- The disk I/O and serial I/O
- And the Apple IIGS powerful toolbox

The Apple IIGS Technical Reference also gives you specifics on programming with:

- Colour graphics
- Sound
- Desk accessories
- AppleTalk and other enhancements.

The Apple IIGS Technical Reference shows you how to upgrade from from your Apple II, design elegant software, and wholly understand the inner workings of the incredible IIGS.

Apple IIGS ProDOS 16 Reference £26.95

The Apple IIGS ProDOS 16 Reference is the authoritative guide to the new Apple IIGS operating system. ProDOS 16 is an advanced ProDOS with extended file-management, device-management, and interrupt-handling capabilities. It can launch both standard Apple II programs and new Apple IIGS programs.

Written for assembly-language programmers and advanced users, this manual gives an overview of the operating system and a detailed documentation of its programming features. It is indispensable for understanding and designing Apple IIGS application programs. The manual is organised into four parts:

- Part 1 shows how ProDOS 16 works and explains how it differs from its predecessor, ProDOS 8
- Part 2 describes all ProDOS 16 commands (system calls) in detail
- Part 3 documents the System Loader, a flexible programming tool that loads, unloads, and manipulates program segments in memory
- Part 4 consists of appendixes, a glossary, and an index. The appendixes describe the ProDOS 16 file structure, outline the history of Apple II operating systems, explain the Pro DOS 16 Exerciser disk, list all ProDOS 16 and System Loader error codes, and provide additional System Loader information

A quick-reference card bound into the manual tabulates ProDOS 16 and System Loader calls, errors, and data structures. The Exerciser disk in the back pocket allows you to practice making ProDOS 16 calls before actually writing an application program.

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Pascal Numerics (SANE) £15.00
Apple IIe Enhancement Kits £39.00

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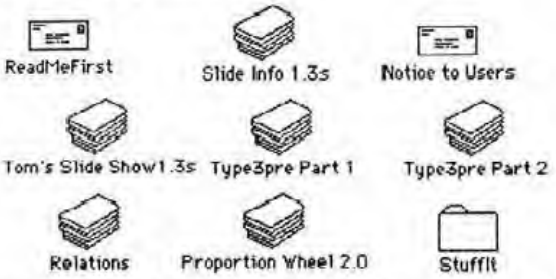
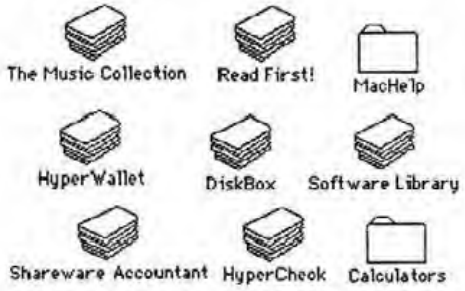
Visual Effects:- this illustrates effects possible with HyperCard, such as dissolves, etc.
ClipArt Viewer:- A place to keep all your clip art and words may be added to any image to aid location.
Import Pict:- This stack was written by Andy Hertzfeld and includes an XCMD to import PICT resources from files. It converts each PICT into a new card in the current stack.
Full Page Paint:- this lets you create full page images in two halves and then re-combine them during printing to make one continuous image.

Disk 067 HyperStacks 7



Proportional Wheel:- lets you scale artwork accurately.
Relations:- Relational Equations in Desktop Publishing, information about kerning, enlargement and reduction etc.
Tom's Slide Show:- imports various MacPaint images and then lets you play them back as a slide-show.

Disk 068 HyperStacks 8



MacHelp:- contains tips and help for the most popular Macintosh programs.
Shareware Accountant:- This is a small accounting system especially for those who are distributing their programs by shareware.
Software Library:- an example stack for organizing a library.

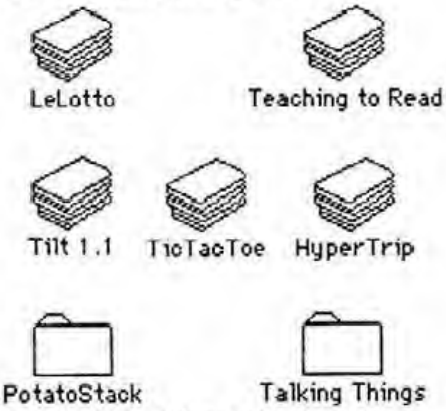
Disk 069 HyperStacks 9

MacWorld Index:- an index to every article in MacWorld from the very first to September 1987. A great help to finding the article you want.
Away From Home:- Zoom into a map of the USA.

Disk 070 HyperStacks 10

This disk contains stacks concerning communications. There is a simple terminal program, a telephone dialler and stacks to organize your clippings from downloads.

Disk 271 HyperStacks 11

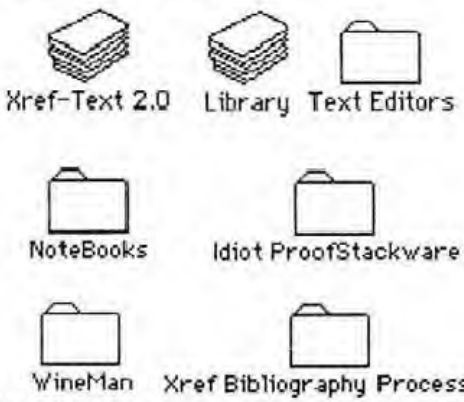


HyperTrip:- neat graphics and animation.
LeLotto:- random numbers for lottery games.
PotatoStack:- lets you play Mr. Potato Head.
Teaching To Read:- modifiable word and sentence lists.

Disk 272 HyperStacks 12

Circuits:- an illustration of Ohm's law.
Lifting Guide:- calculates safe weight limits for lifting.

Disk 273 HyperStacks 13



IdiotProofStackware:- from MacSolutions; full of hints and tips for using HyperCard, together with buttons and sounds for using in stacks.
Notebook 2.5:- can import text files.
XRef Bibliography Processor:- a utility for keeping track of cross-references in large documents. Works only with Microsoft Word 3.0 or 3.01 at the moment.

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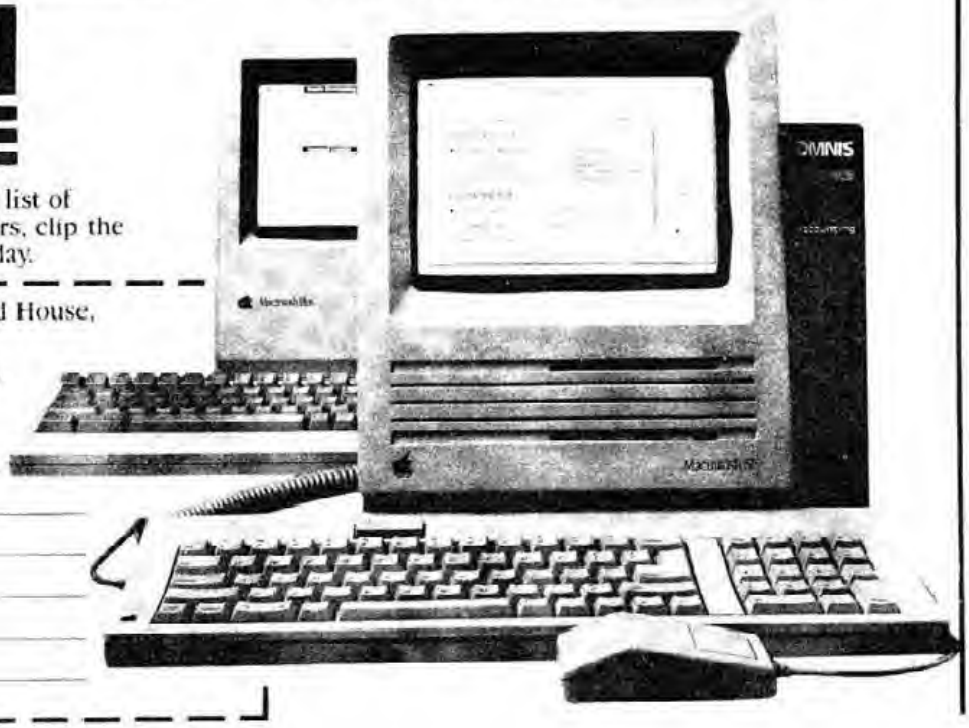
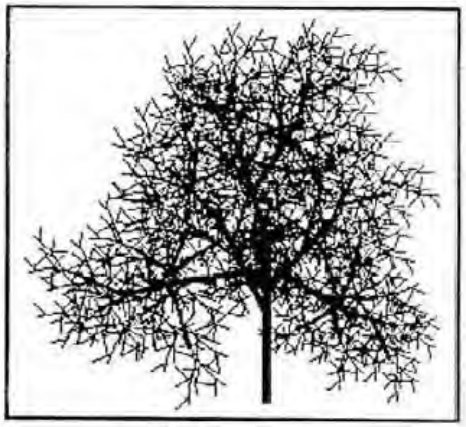


Fractal Studio

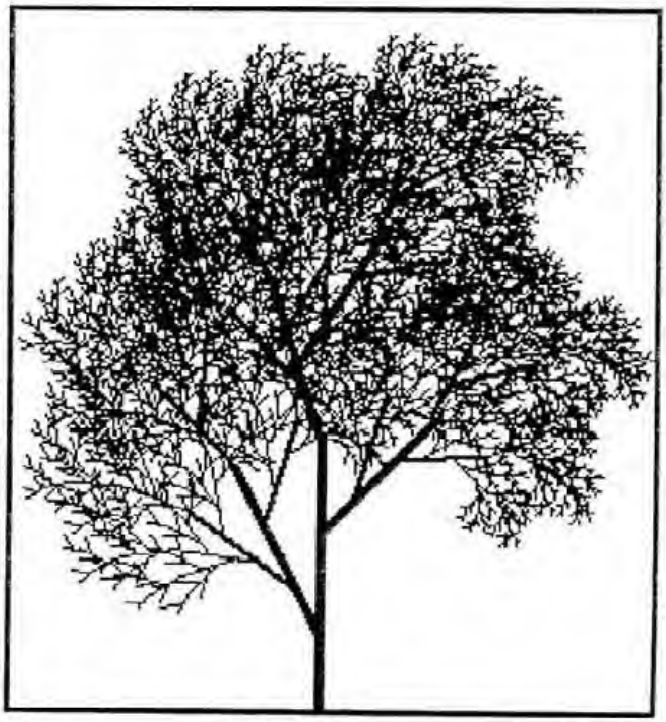
Norah Arnold takes a look at Fractals for artists and designers.



Old Lime Tree

Most people who have had their Macintosh some time will probably have come across some of the fractal programs available for the Macintosh, such as Fractals 1, Fractals 2, Mandelbrot and Mandelzoom. These programs are fascinating but they are different in their aims and design from Fractal Studio.

In the preface to the manual, Michel Berger, the author of Fractal Studio, writes that the idea of producing this program came to him while reading an article in the August 1985 edition of MacWorld. The article was by Matthew Zeidenberg and it outlined a number of programs for producing fractals, written in Pascal. Berger aimed to produce a program which would be sufficiently flexible to produce all kinds of fractals.



Pear Tree

The Fractal Studio disk contains a System, Finder and driver for the ImageWriters. It will print to the LaserWriter if you add a driver. The disk also contains a Localiser so that the user can change the keyboard configuration of the System. Fractal Studio appears on the disk as the icon AFract and with it there are folders of examples.

The minimum configuration for running Fractal Studio is 512K. The program is not copy-protected and I am able to run Fractal Studio from a hard disk.

When the program is started up, the menu bar appears, together with a second bar containing a small selection of tools. Two windows also appear, named 'Generator' and 'Initiator'.

The tools that can be selected from the second bar are firstly, an arrow to select objects and manipulate them; secondly, a line segment for drawing straight lines; and thirdly, a zig-zag tool for drawing broken lines.

In order to produce a fractal design, one starts by clicking on the Generator Window, choosing the straight line tool and drawing a line in the window, going from the bottom upwards. This line may be converted to a 'mother line' by choosing Mother from the Line Menu. The fact that the line has been converted to a 'mother' is indicated by it changing from a solid to a dotted line. 'Daughter lines' may then be added to the original mother line.

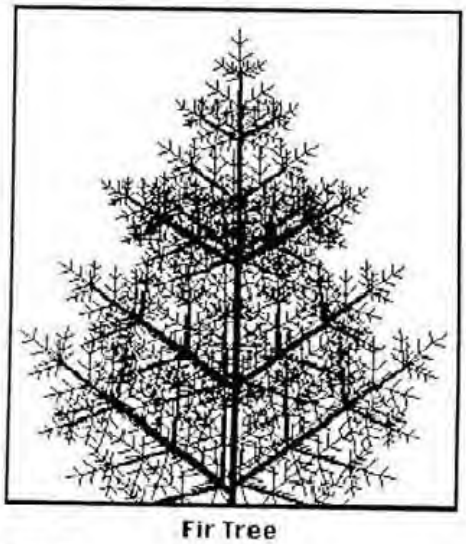
A generator as described above, that is, a mother line with two daughters, the whole generator looking rather like a letter Y in shape, expresses the idea that on each act of generation one line (represented by the mother line) produces two lines (represented by the daughter lines).

Wind Blown Tree

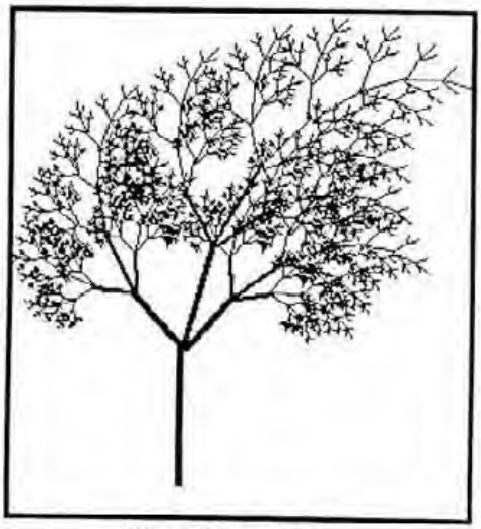
Generator

In order to complete the information necessary to produce a fractal, the stock or initiator must be drawn in the Initiator Window. Once this is done, the fractal may be drawn by choosing Go from the Plot Menu, but at the beginning it is better to start by choosing Step, from the Plot menu again. Step can be chosen four or five times in succession until you like the fractal that you have produced and do not wish to complicate it further.

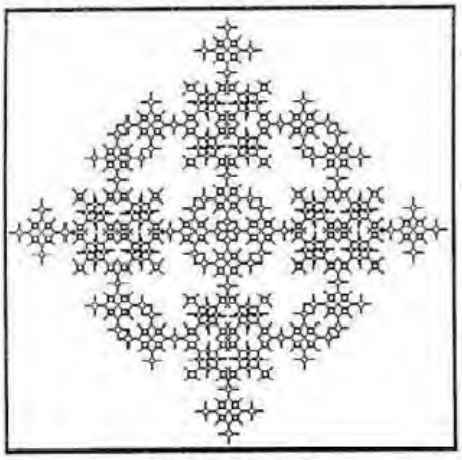
If the fractal you have drawn is



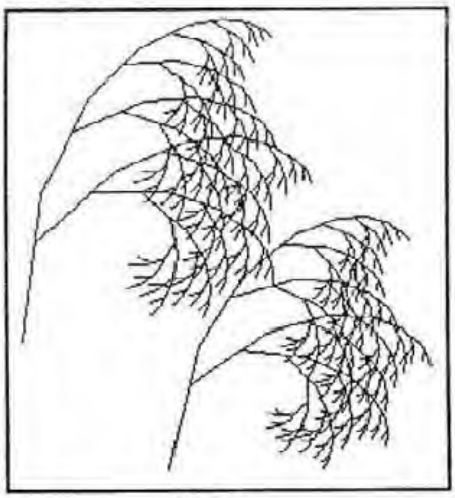
Fir Tree



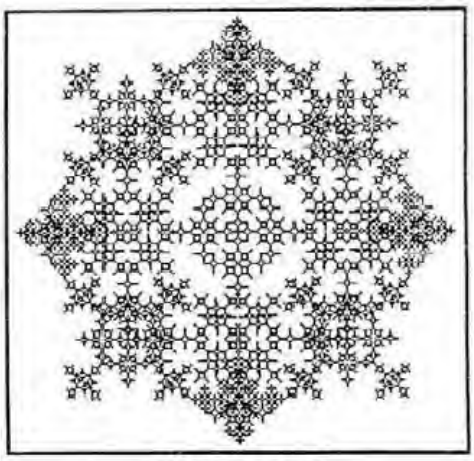
Wind Blown Tree



Embroidery 1



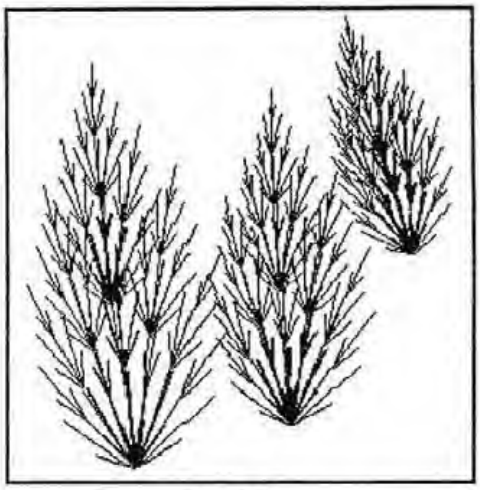
Herbs



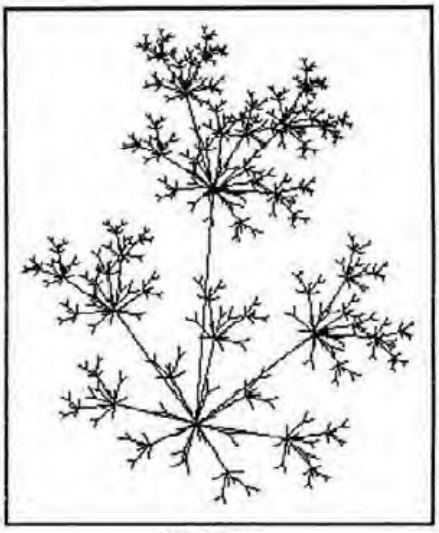
Embroidery 2

very much too big or too small then this can be put right by choosing Reset, again from the Plot Menu. This returns you to the Initiator, which can be selected and then reduced, enlarged or rotated by dragging one of its handles. The fractal then may be plotted again to see whether the size, etc. are what you wanted. Other alterations may be made by adjusting the relationship between the length of the mother and daughter lines in the generator.

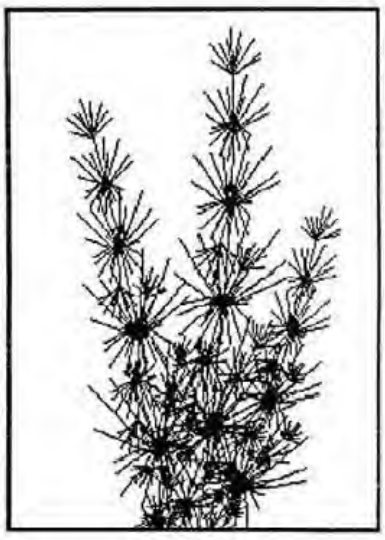
In a generator, most of the daughter lines will be fertile, ie. they will produce new lines at each generation. However, sterile lines can also be drawn in the generator, and these will be plotted at each generation, but will not reproduce themselves. Sterile lines may be distinguished from fertile daughter lines in the generator by the fact that they have no arrow at their tip.



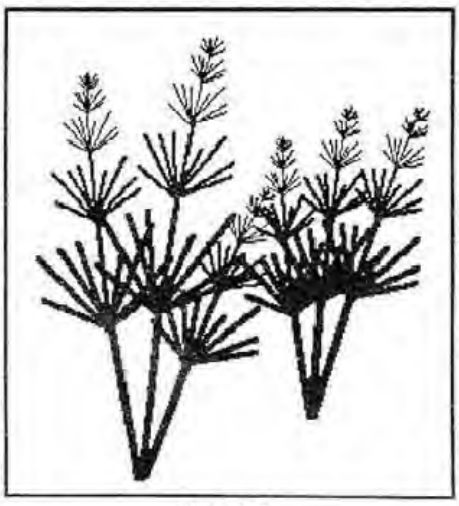
Plant 2



Plant 1



Plant 4



Plant 3

More complex shapes may also be drawn in the generator by using the zig-zag tool, which is called the 'broken line tool' in the manual. This tool works rather like the polygon tool in MacPaint. The user points to the location where the shape is to start and clicks, then moves the cursor and clicks at each location where there is to be a corner. A double-click ends the line. Stars and other shapes are quickly incorporated into your fractal by the use of this tool.

On these two pages, the illustrations show some of the beautiful fractals which may be drawn in Fractal Studio. Producing tree-like shapes is comparatively easy, and it is fascinating to see the tree change shape as you play around with the length of lines and angles within the generator.

As Michel Berger has demonstrated his program to Macintosh users, a number of applications to which the program may be put, have been discovered. Architects need to put illustrations of trees into architectural drawings, and this program is very good at producing tree-like fractals. People interested in textile design and embroidery are always looking for new ways of creating designs and Fractal Studio enables them to produce original designs suitable for their craft. It has even been suggested that Fractal Studio can stimulate the design of new forms of jewellery.

A program to interest the creative and artistic Macintosh owner.

info

Product : Fractal Studio
Publisher : mib-genie logiciel
Available from :
mib-genie logiciel
P. O. Box 359
CH-2301
La Chaux-de-Fonds
Switzerland
Price : US$79.00

Value :
Performance :
Documentation :

Network News

The latest news, tips and gossip from the networks

From: merchant@dartvax.UUCP (Peter Merchant)
Subject: **Rumours etc.**
>From Spencer F. Katt's "Rumor Central" article in this week's PC Week: "Three weeks ago, Spencer told us, Apple got its hands on beta chips for the 68040—A 64 bit chip! And Sculley's crew already has the 68040 up and working in a Mac II chasis, running an emulation of the 80286 as a subregister in the chip. "That's right, said the Saber Truth Tiger, the chip was running MS-DOS and Mac programs simultaneously—and very, very fast. The 68040 should also be able to run OS/2. This Mac could leave the PS/2s in the dust if it could be brought to market in time, Spencer thinks. But that's a very iffy prospect."
Wow.
Also, by the way, I'm continually being amused by PC Week, the self-proclaimed National Newspaper of IBM Standard Microcomputing. Looking at their front page, the headlines read: "AT&T Reaffirms Its Commitment to Computer Business" "Esber Vows to Fight dBASE Standardization" "Personal LaserWriter To Lead Apple's Corporate Change in '88" "IBM Begins Shipping SAA; Apple Reacts with DEC Alliance" (This, by the way, is two articles, one on IBM and SAA and the other on Apple and DEC.)
So, two out of five articles deal with Apple. They also have a very nice article on Macintosh-to-PC file transfer. Past articles in PC Week have included their commentator, Jim Seymore, and an article entitled "The Macintosh: Ignore It At Your Own Risk." They've also done reviews, in their software columns, on 4th Dimension and HyperCard. A few weeks ago, they had an article on someone's battle in Georgia's Department of Industry and Trade to accept the Macintosh. They also had an article entitled "Why the Macintosh? Corporate Users Speak Out."
I may cancel my subscriptions with MacWeek and Macintosh Today. I get the best coverage from PC Week, the National Newspaper of IBM Standard Computing. — "But I've made up my mind,
Peter Merchant (merchant@dartvax.UUCP)

From: jeef@ihlpg.ATT.COM (Harlong)
Subject: **Command - Option and Other tricks.**
About hidden Mac features .....
Okee here he goes:

Finder Enhancements:
Option Close (box or menu)
Close all windows from the desktop
Option Clean up
Align all of icons in the active window with the grid used by clean up windows
Option Double click on disk or folder
Opens the icon; but after you open an application or document in the window, the window is closed when you return to the finder
Option Quit program or mount disk
Returns to Finder with no folders open.
Option Drag Icon to trash
Places locked file or application in trash without warning message.
Option Drag a document, folder or Application to a new folder.
Duplicates the document, folder or application in the new location, and does not Move it.
(Finder 5.4 and later)
Option Init or erase a disk
Initializes a 400k disk as an HFS disk.
Clover: Drag a window
Moves the window without making it active.
Clover Drag an icon (in icon views)
Aligns the icon with the grid used by clean up windows.
Clover Double click on an icon
Makes the icons window active.
Clover press ^ in a standard file dialog box (^ is up-arrow)
Moves up in the file hierarchy
Clover press v (down arrow) in a standard file dialog box with a folder selected
Opens up the folder
Clover Press "."
Cancels a print or copy job.
Clover
Then a list of "standard cases"
A, C, D, E, I, N, O, P, V, X, Z
Option-Clover
Option-Clover Double click on a Finder Icon
Makes the disk with the chosen Finder the current startup disk.
Option-Clover Mount a disk
Rebuilds the desktop file; you lose any comments you had in the Info window, but you gain speed.
Option-Clover Press Tab
Ask whether you want to reinitialize a disk when it's being mounted

Shift: Click on an icon
Selects or de-select an icon without (de)selecting other icons.
Clover-Shift 1
Eject internal diskette (if present)
Clover-Shift 2
Eject internal diskette (if present)
Clover-Shift 3
Creates a MacPaint document of the current screen
Clover-Shift 4 with Caps lock up
Prints the contents of the active window if an Imagewriter is present
Clover-Shift 4 with Caps lock down
Prints the current screen if an Imagewriter is present

When a standard file-dialog box is on the screen, clicking on the (hard/ram) disk icon returns you to the root level of that disk.

Option - "Clover" - Shift Delete
Startup a Mac with a diskette inserted
Prevents the Internal SCSI hard drive from being mounted.

MacWrite enhancements:
To select a large area of a document: Drag the pointer diagonally over the text you want to select Click once at the beginning of the portion of text you want to select. Then move to the end of the area you want to select, and click when holding down "shift". This will select the area between the click and the shift click
To add page breaks to a document: Use the Insert Page

break command from the Format Menu to insert a Page break instead of using "Return" to add line spacing to the document. This will make it easier to edit the document.

To space evenly numbers in a column: Use decimal tabs by positioning the pointer on the tab well (the triangle on the ruler with the period in it) and drag the triangle to the point on the ruler where you want the decimal point of the numbers to lie. When you tab to this spot, any numbers you type will move to the left of the tab until you enter the decimal for the number. Then the numbers will be entered to the right of the decimal.

To retype characters that have been deleted by backspace: Hold down "clover" and press "delete". You can retype up to 50 characters that have been deleted.

To start Page numbers on the second page of the document: Choose the title page command from the Format Menu. fyou want to start the numbers at 1 instead of 2, choose Set Page # from the Format Menu and press 0. Page Numbers are created in the Open Header or Open Footer commands in the Format Menu.

To mix text and graphics on the same line: Create both the text and graphics in Macpaint or Macdraw, and Paste the whole thing into Macwrite as a graphic.

MacPaint enhancements:

Draw borders in the active pattern rather than in black: Hold down "option" while drawing boxes or circles. The thickness of the borders is determined by the line width

To rescale the size of an object: Cut or Copy the object. Use the dotted box (marquee) tool to draw a rectangle that you want the object to be scaled to. Paste the object and it will be scaled to the size of the rectangle.

To create multiple copies of an object: Define an object with the selection rectangle or lasso. Hold down the Clover and Option and press the mouse while moving the mouse. Multiple copies will be made. Rapidly moving the mouse produces unevenly spaced copies, while slowly moving the mouse produces evenly spaced copies. The line width determines the spacing of the copies. To keep your copies in a straight line, keep "Shift" pressed to constrain the movement of the mouse.

To stretch an object: Surround the object with the selection rectangle, and point to the edge (the cursor will become an arrow). Hold down Clover, press the mouse button and "pull" the object until the shape is the way you want it. If you "grab" the edge near the middle, you can stretch the object in the direction of the edge.

To maintain a pattern while you stretch an object Choose Grid from the Goodies menu.

To paint or spray "underneath" objects already on the screen Hold down "Clover" while using spray or brush

To quit MacPaint, eject the disks, and restart the system hold down clover, and Quit.

Font DA Mover enhancements:

To Start DA's mode rather than Font Mode Hold down Option while starting FDA-Mover

To Display All files in FDA-Mover. Hold down Option and click Open. This allows you to install fonts or DA's into a specific application or into other files that have resource forks. Useful when you need a DA or Font only within a specific application.

To eject the disk when closing a list of Fonts or DA's. Hold down Option while clicking the close box.

To eject all non-essential disks when quitting: Hold down Option, and click QUIT.

To Show how many bytes of a DA are occupied (Suppose this one is out of date) Hold down Option and click the name of the DA

Disk First Aid enhancements:

Press Clover-S after selecting the disk to be repaired. This will provide additional Info about the disk repair process

MacDraw enhancements:

To Wrap pasted text within an area: Create the rectangle that the text is to wrap within, and press any key (hitting the space bar will suffice). Any text that is pasted will wrap to the size specified by the original rectangle.

To select a Block of text: Tripple click with the text tool in a block of text. This applies only to paragraph text. (Refer to Macdraw manual for further explanation)

To redraw the type of object that was most recently drawn. Hold down clover, and click where the new object is to be drawn. The previous action will be selected automatically. All of the objects drawn while "Clover" is held down will be selected when you release clover and the mouse button.

To center text in a box: Shift click to select the text and the box in which you want it to be centered. Choose Align Objects from the Arrange menu. Click L/R Centers (horizontal centers) and T/B Centers (vertical centers), and click OK.

To resize several objects in the same time: Shift Click to select the objects and choose Group from the Arrange menu. You can now resize all of the objects at the same time by clicking once on an object and moving on of the handles of the object.

To change the default font: Click the pointer tool and choose a font from the Font Menu.

To Capitalize The First Letter Of Every Word In Selected Text: Select Text And Choose Title From The Style Menu.

To center an object on an point: Cut or Copy the object, click where the objects center is to fall, and Paste.

MacProject Tricks

To create dependent boxes: Draw a dependency line from the center of any existing task or milestone box outward to the right. When you release the mouse button, MacProject draws a new task box the same size as the original box. The new task box is dependent on the task you started the dependency line from.

To Move quickly to the Task Info Window: Press Tab after you've drawn a new task or box. A Task Info Window appears presenting duration and resources for the new task. The first blank is automatically elected. Pressing Tab again moves the insertion point to the next blank or the first task if you're in the last blank.

To add text to a chart: Click anywhere you want to add the text (any chart or table). Then enter the text.

Minifinder Tricks:

To return to the Finder from an application when the MiniFinder is active: Hold down option while quitting an application.

To quit the MiniFinder and return to the Finder: press Enter while in the Minifinder. This is equivalent to clicking the Finder button.

To change drives in the MiniFinder: Press Tab while in the Minifinder. This is equivalent to clicking the Drive button. By doing this, you may specify which disk's Finder you want to quit to, as the Minifinder will start any Finder on any disk as long as the Finder exists on that disk.

MacTerminal enhancements

To Simulate cursor key movements: Hold down Option and click where you want the cursor to be. Macterminal transmits the appropriate cursor key sequences to the mainframe.

ABSOLUTELY NO GUARANTEE ON THE AFOREMENTIONED TIPS !!!

(This was made possible in co-operation with Dutch Mister T. Disk)

And the standard disclaimers, I don't, will not, should not, am not representing "anybody" here.

Source: Mastering Macintosh - For Apple Eyes Only.

Piter Jonker, Hilversum, (A center Town of) Holland.

ihnp4!ihlpg!hvlpa!pjonker.

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MacLightning

Version 2.0 from Target Software Inc.

PRODUCT EVALUATION REPORT

Description: A Spelling and Grammar Checker Desk Accessory for 512K Macintosh and Machintosh Plus.

Tested on: Macintosh Plus with System B1-3.2 and Finder B1-5.3 Ram Cache on Control Panel set at 256K 'ON'.

Software: MacWrite Version 4.5

Configuration: Macwrite and System Folder in Internal Drive. MacLightning Disk 2 in External Drive.

MacLightning consists of 2 disks and a well documented manual. The first disk contains a System Folder, Font/DA Mover, MacLightning DA basket and sample memos - one for MacWrite, one for Microsoft Word. The second disk contains the Webster Dictionary. In general the Product is easy to understand and use.

MacLightning is installed as a DA in the normal way. It requires to be selected from the Apple Menu each time a Document is opened and, if sufficient RAM memory is available the Dictionary will automatically be loaded into RAM. A MacLightning Menu, identified by a check mark or tick, is added to the Menu bar following selection. The MacLightning Menu has an option "About MacLightning " which gives the working location of the Dictionary and the free memory available.

MacLightning creates its own RAM Cache, if there is RAM space available, which is additional to and not part of the RAM Cache created in the Control Panel. The Dictionary was not loaded into RAM when the Control Panel RAM Cache was set at 512K.

The MacLightning Menu provides for two operating modes Interactive and Non-Interactive. If "Interactive" is not selected, MacLightning works 'on demand', and is brought into use by choosing "Check Selection". This Menu also provides for direct access to the 3 Windows used in the program "Analysis", "Misspelled" and "Library".

INTERACTIVELY means that the program carries out a continuous Spelling and Grammar Check "beeping" each time something is typed which the program recognises as a mistake. The description "Grammar Checking" is misleading and "Mistake Checking" would be more appropriate. The Manual spells out "The types of mistake flagged include" - forgetting to capitalise the first word in a sentence, typing the same word twice, placing an apostrophe incorrectly in a contraction and typing a capital in the middle of a word.

NON-INTERACTIVELY means that a number of paragraphs are selected by dragging the Mouse across the selection and then choosing "Check Selection" from the Menu. This method provides a reasonably accurate word count in the "Analysis" Window and a list of errors in the "Misspelled" Window which include American spelling differences, Alpha-Numeric numbers and all the times where the apostrophe is used to provide 'single' inverted commas.

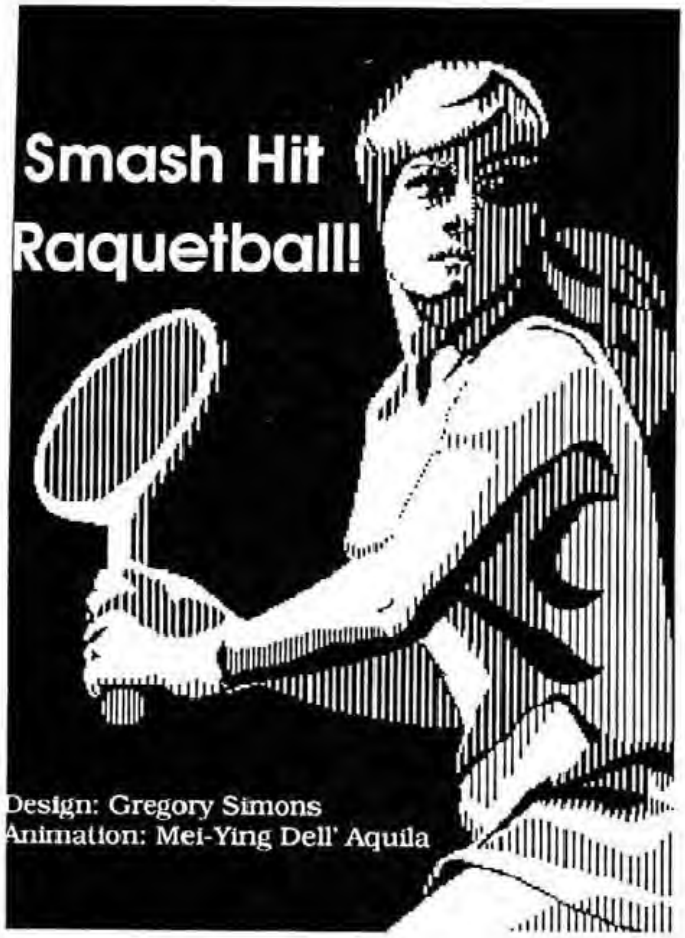
THE DICTIONARY provides a fast and easy to use method of checking spelling. The facility to customise by adding technical jargon or foreign words is a good feature. The Dictionary falls down by attempting to provide a phonetics search option which provided itself to be largely unsuccessful against the tests given to it.

SUMMARY

In its Interactive mode MacLightning can be useful to the User who is neither a touch typist nor a Confident speller and who will quickly identify the "bleep" as a reason for looking at the display. Experience in using MacLightning, showed that the User learns to ignore "beeps" which might be anticipated e.g. - ise instead of - ize etc.

Non-Interactively MacLightning could be of use to the User whose Wordprocessing needs are met by MacWrite and are mainly for business letters, with an occasional report and a need for a word count*.

* (As an example, excluding this footnote, this report was analysed as containing 543 words and was shown after sort to have 18 words misspelled. Of the 18 words identified 4 were technical jargon, 5 were 'ises', 3 were apostophes and 6 were Surnames or Product names. Draw your own conclusions!)



SPORT FOR ALL

Introduction

When I got Smash Hit Raquetball I went straight for my Mac. I found out that it takes a while to load up. When loaded it asks for your name. With the lower American keyboard the bottom row of keys plus a few others are moved one place to the left so don't go thinking that the keyboard is faulty, your Mac is not damaged!

On the real game there is of course two players you are the dark man. Control is by the use of the mouse and a few keys.

Menu

Use "m" to go to menu.

On menu, jotting around the varous lists you have things like 'Resume play', 'Start a new game', 'Normal replay' and 'sound effects'.

Sound effects

If you want to have no sound move the pointer to off. There is a sound list from 1 to 9.

Replays

Like television most sport games have replays. This game also has replays - slow motion or normal.

Levels

There are levels of 1 to 4.

1. Beginner
2. Intermediate
3. Advanced
4. Professional.

Method of Play

The game is played on court similar in size to a squash court. There are 2 players on the court. You serve first. After eleven points if you get them or the computer gets them first, another game is played to decide who wins. If both players reach eleven points each and have a round each then a tiebreaker commences.

Object of the game

Your object is to win two rounds of play before the computer. Thus scoring twenty two rounds of game play.

Service

You start serving first. You are the player engraved in black (not grey).

Ball control

By using keys you can move the ball in any direction. This is instead of just hitting the ball straight.

Strategy

From beginner to professional the Strategy depends on you. Serving is one thing you'll find difficult because its that many times quicker than the other levels. Make sure after each shot to put yourself in the centre of the court, you should be behind the sevice zone.

If you are to the left or right then you are dead. If you are in the middle then it's harder for the computer to angle the ball so you can usually return it.

Conclusion

Belive me this game is just brilliant, the graphics, animation, and sound are really good. For armchair sports enthusiasts the game is a must. You feel like you are actually playing, without the need for another lung or to pass through the pain barrier. The adrenalin flows and perspiration has to be wiped off the forehead. This game should carry a Government health warning for moribind armchair sport fanatics who are at particular risk from self-inflicted coronaries.

Squash and Racketball enthusiasts will get endless hours of fun from this game at the risk of 'Mouse elbow' rather than 'Tennis elbow'. One drawback though. You need a 512k or a Macintosh Plus/SE.

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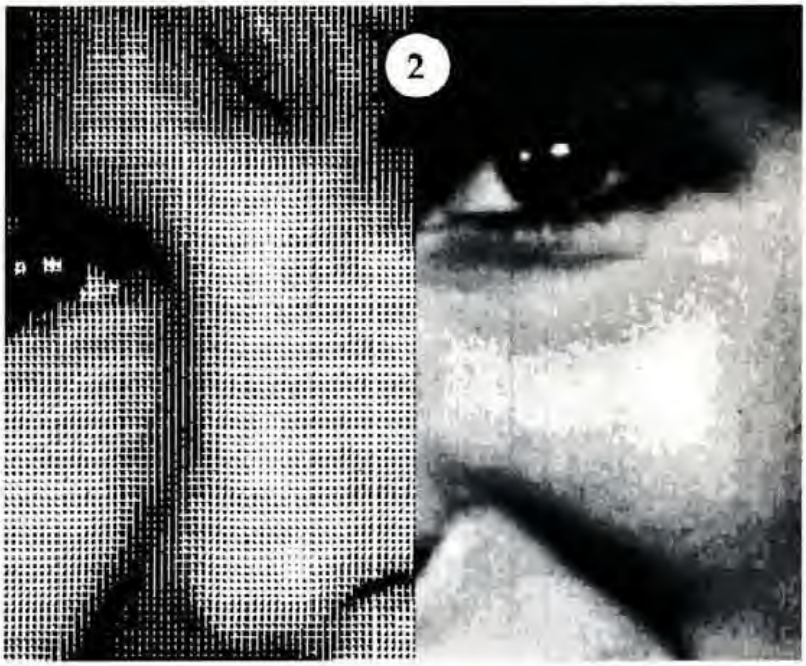
HALF TONE GREY SCALE



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- To see how it differs from the rest, we've included an example - an image scanned from a photograph, like you've never seen it before!
- Picture 1 shows the picture at full-scale, exactly as scanned.
- In the second picture, we've expanded a small area of the same image, showing how well it's appearance is preserved even when blown up three-fold.
- Finally, the third picture blows up the image twice more, to let you see the secret of this magnificent clarity - only now just visible are the individual pixels that come together to make the 16-level (4-bit) true grey-scale image that no other scanner system can offer.
- There are no special tricks here - the picture is completely unretouched, and printed on a Linotron printer.
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